ME-8731
Doc

UEO36088

CATERPILLAR

parts

D353 Engine

46B1558-UP
77B1 to 77B321

QUICK REFERENCE CHARTS

USE THESE CHARTS TO RECORD FREQUENTLY USED MAINTENANCE INFORMATION

MACHINE SERIAL NO.	
EQUIPMENT NO.	

FREQUENTLY REPLACED ITEMS

PART NO.	PART NAME

FLUIDS & LUBRICANTS

WHERE USED	TYPE	AMOUNT

OTHER MAINTENANCE ITEMS

ME-8731

D353 ENGINE

HOW TO ORDER PARTS

Please be sure to furnish the quantity, part number and name of each part wanted. It is also important to give the serial number of the machine for which the parts are intended. Location of serial number plates may be determined by referring to the "Specifications" page of this parts book. It is suggested that you write the serial number of your machine in this space so that it will be readily available when you need it.

THIS PARTS BOOK FOR MACHINE SERIAL NUMBER

.....

MADRID - SEDE 3 JUL. 1984 DOCUMENTACION

To insure prompt delivery, please don't overlook furnishing the correct name of the consignee, also the street address, town, county and state to which the parts are to be shipped, and indicate whether shipment is to be made by freight, express, parcel post or by other means.

WHERE TO ORDER PARTS

Caterpillar dealers maintain over 400 stores in the United States, and similar establishments are located strategically in nearly all countries throughout the world. These organizations are backed by the extensive facilities and resources of Caterpillar Tractor Co.

Dealer personnel are factory trained in the stocking and issuing of parts, and large stocks are constantly maintained to insure prompt service. Contact your nearest Caterpillar dealer to make sure that he has your name and address, the correct serial number of your machine, and an accurate list of accessories and attachments. This record will facilitate the issuance of parts when you need them in a hurry.

WHAT THE CATERPILLAR DEALER CAN DO FOR YOU

Caterpillar dealers are in the business of making it economical and profitable for you to own and operate Caterpillar machinery. They are in constant touch with the factory for new developments in repair and maintenance methods, operating procedures, and parts requirements. Their parts stocks are active and up-to-date, including all parts normally required to protect your investment in Caterpillar machinery.

Nearly all Caterpillar dealers offer 24-hour emergency service. For quick reference, write the name and address of the local dealer on your desk pad or the front of your phone book.

ONLY CATERPILLAR PARTS GIVE CATERPILLAR PERFORMANCE

The same quality and craftsmanship that has made Caterpillar products famous throughout the world is built into all Caterpillar replacement parts.

REVISION PUBLISHED DECEMBER 1981

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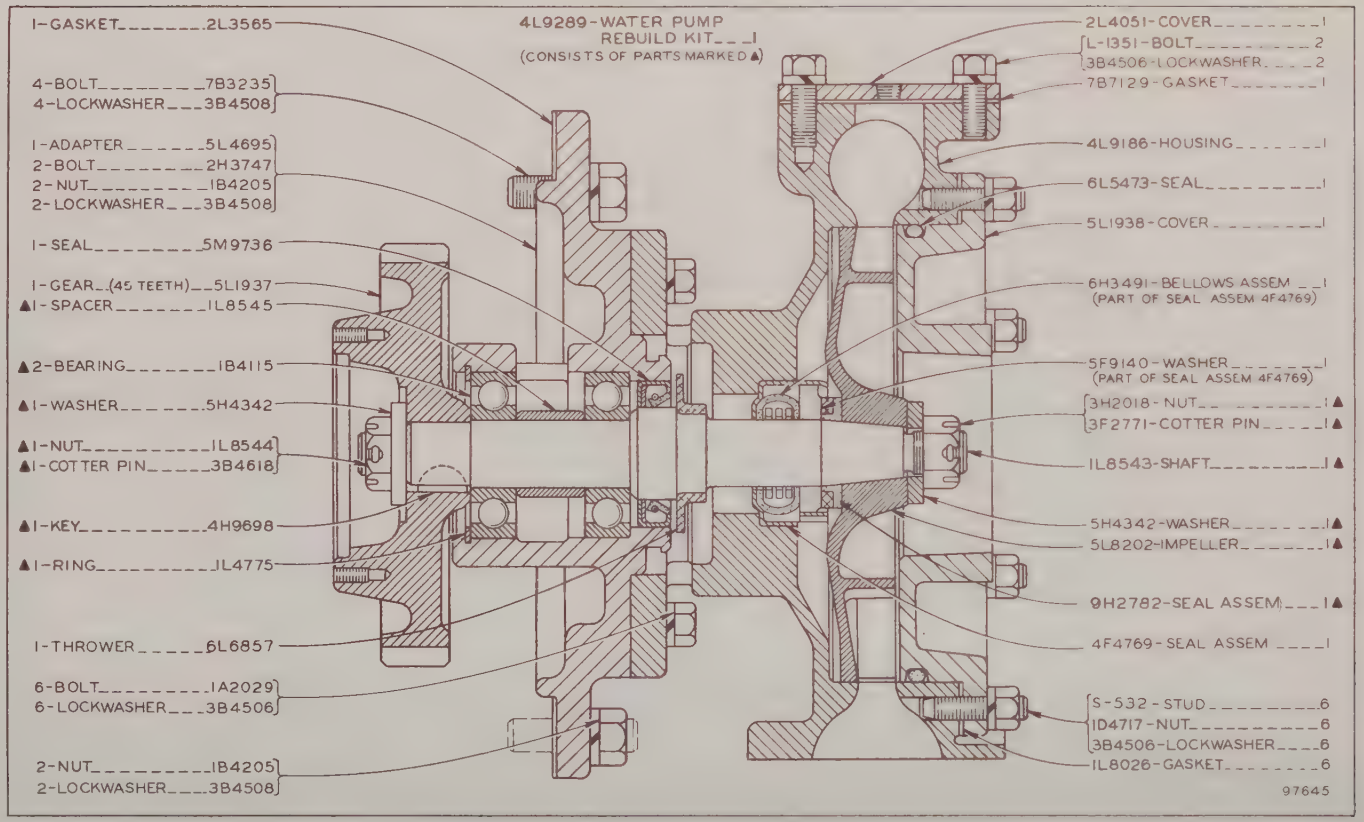
1	7L5467	OIL LINES GROUP	43
1	7L5468	CRANKSHAFT GROUP	30D
1	8L4941	FUEL FILTER GROUP	40-1
1	7M7423	FUEL INJECTION VALVE AND LINES GROUP ...	42-2
	- OR -		
1	8N3460	FUEL INJECTION LINES GROUP	42-4
1	2N1814	FUMES DISPOSAL TUBE GROUP	20C
1	2N5649	FRESH WATER PUMP AND DRIVE GROUP	14A
1	3N654	FUEL PRIMING AND TRANSFER PUMP GROUP ...	39A
1	4N5111	FUEL PUMP HOUSING GROUP	41B
1	7N2703	GOVERNOR GROUP 128B-8	
	- OR -		
1	7N9923	WOODWARD GOVERNOR GROUP	35C
1	7N4201	FUEL PUMP AND GOVERNOR DRIVE GROUP 38-1c	
1	7N4199	GOVERNOR DRIVE GROUP	35B
1	6N136	SHUT-OFF COVER GROUP	38-2
6	6N6641	ROD AND PISTON GROUP	34A
1	7N1767	OIL FILTER GROUP 44A-4	
1	7N3036	CYLINDER HEAD GROUP	23F
1	7N3041	CYLINDER BLOCK GROUP	27C

7N4374 ENGINE ARRANGEMENT—UG8 Woodward Governor
Serial No. 46B6559—Up

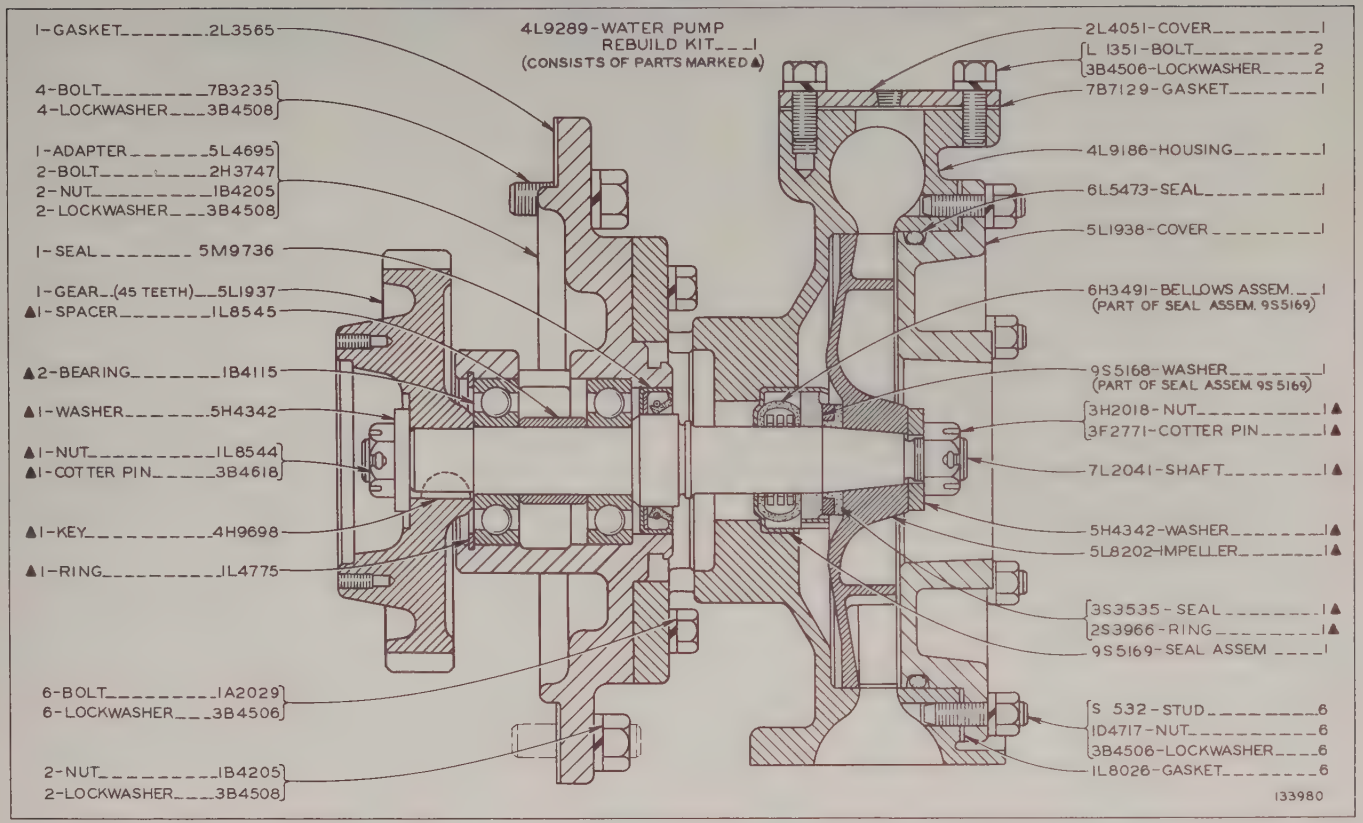


5L1936 FRESH WATER PUMP AND DRIVE GROUP
SERIAL NO. 46B1558 TO 46B1797 INCLUSIVE AND 77B1 TO 77B123 INCLUSIVE
SEE PAGE 32 FOR GASKET KIT. REFER ALSO TO PAGE 92 FOR SPECIAL PARTS

5L1936 FRESH WATER PUMP AND DRIVE GROUP

Serial No. 46B1798 to 46B3888 inclusive and 77B124—Up

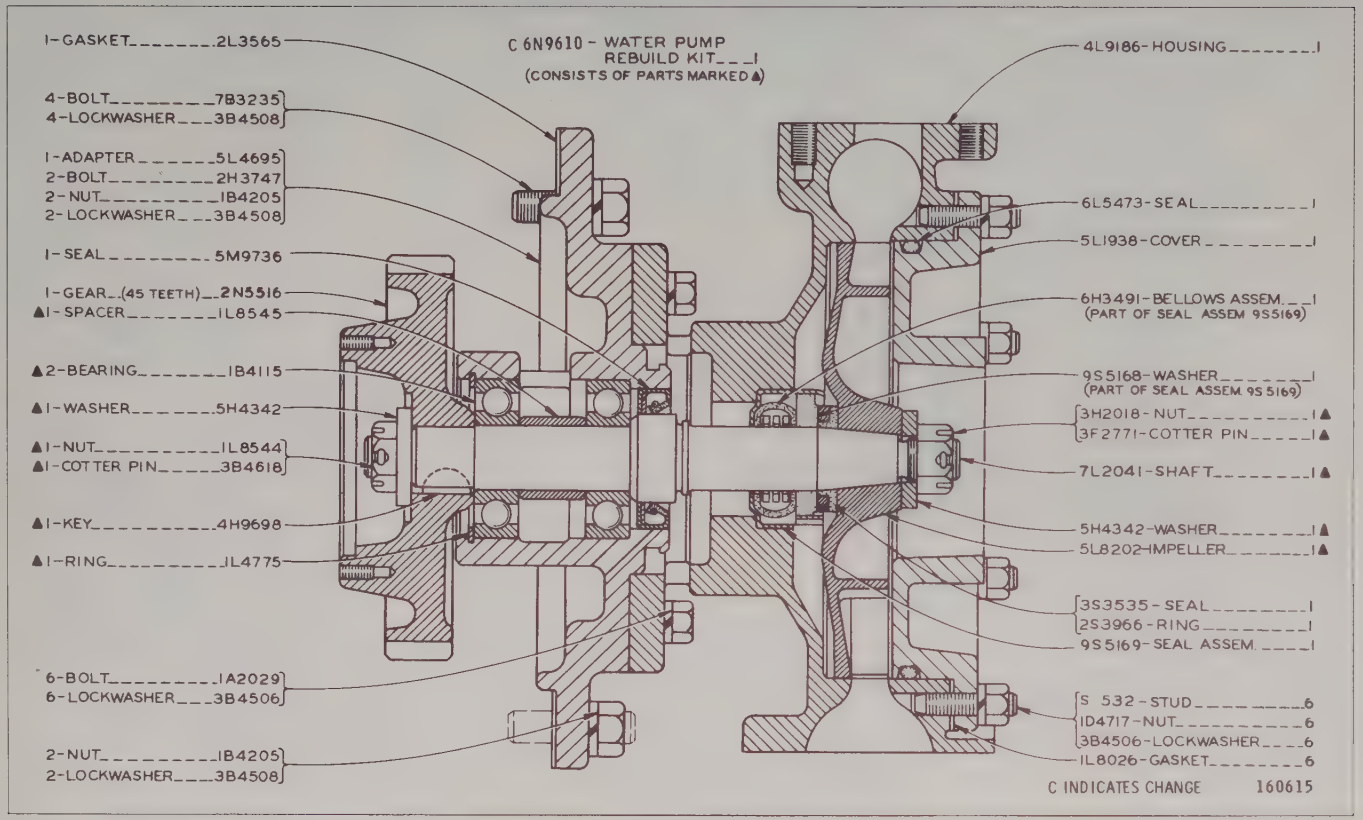
See Page 32 for Gasket Kit. Refer also to Page 92 for special parts

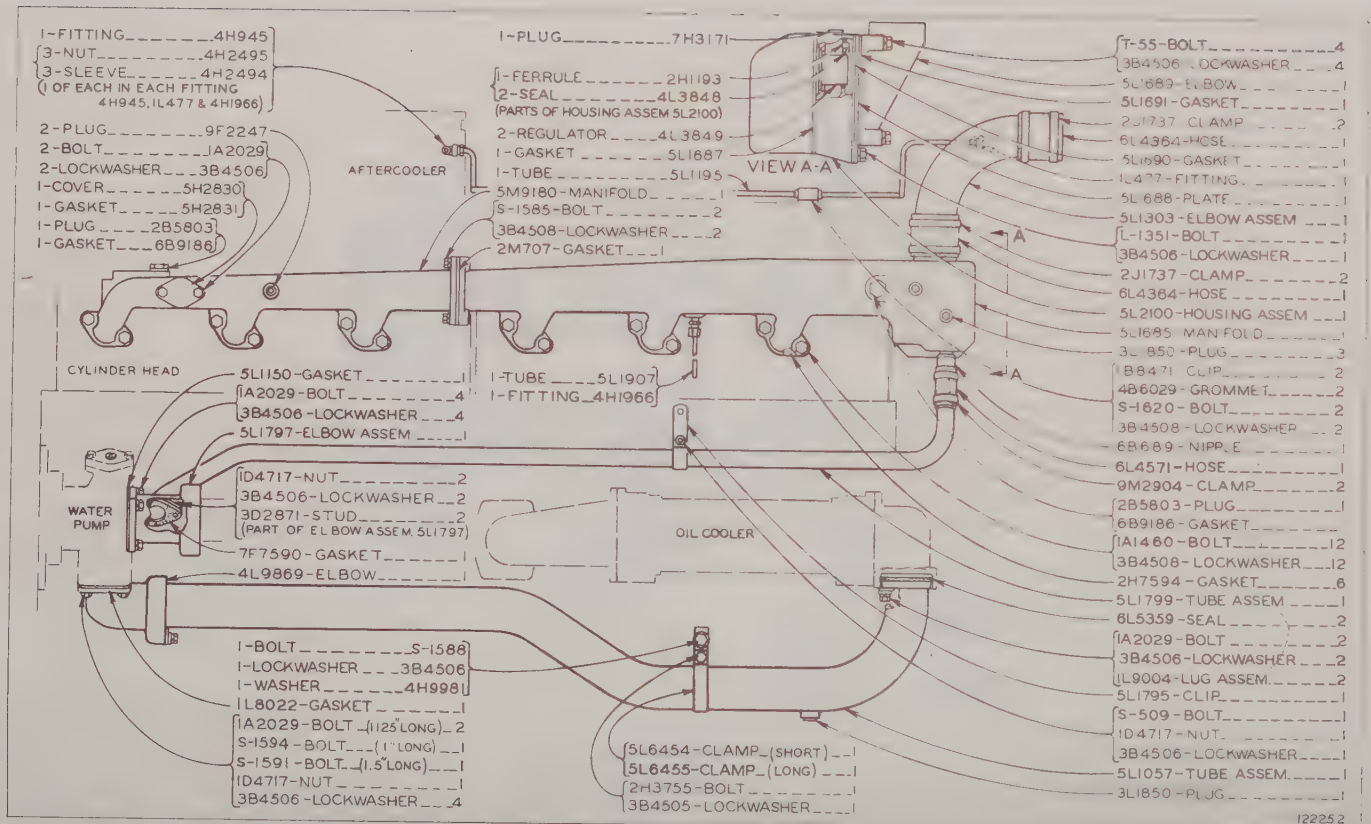


2N5649 FRESH WATER PUMP AND DRIVE GROUP

Serial No. 46B3889—Up

See Page 32 for Gasket Kit. Refer also to Page 92 for special parts



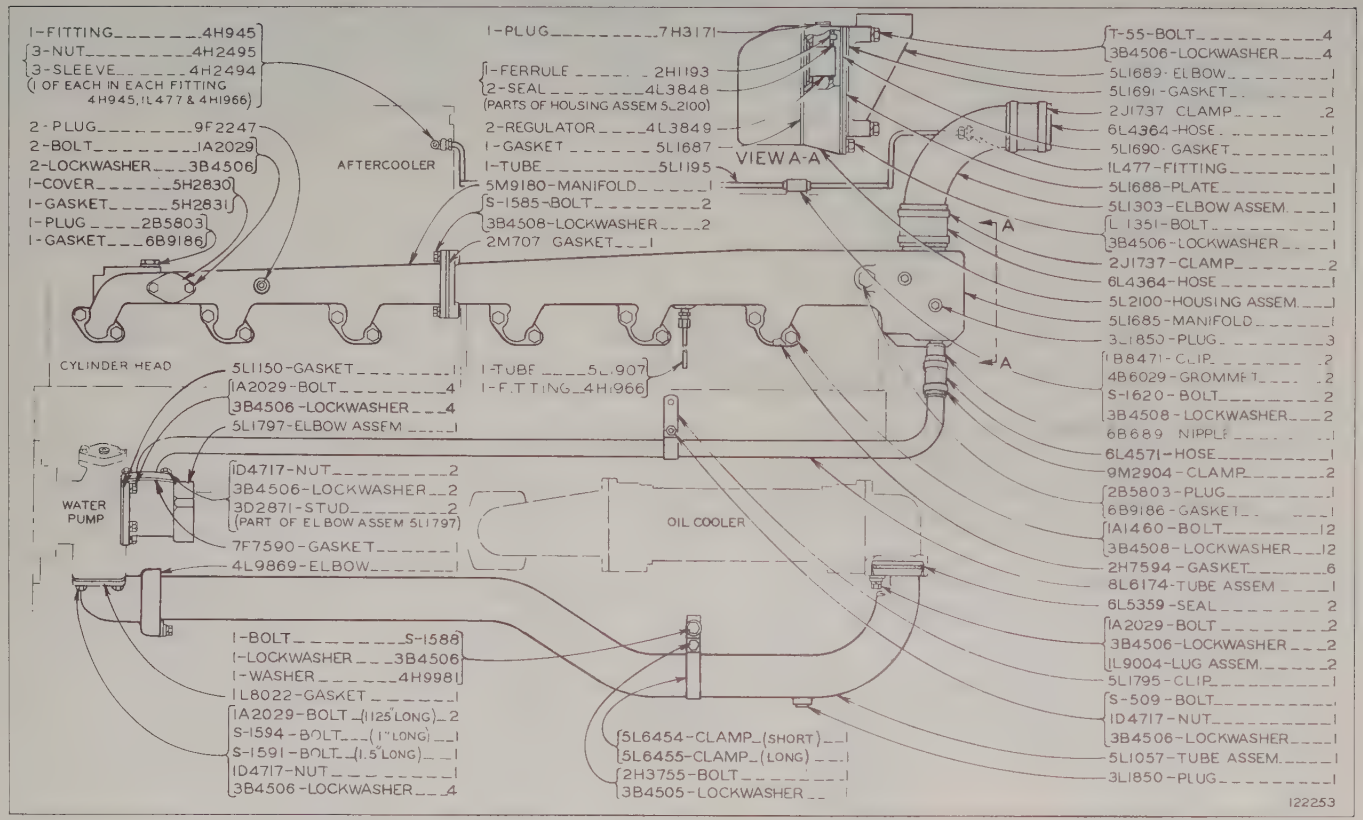


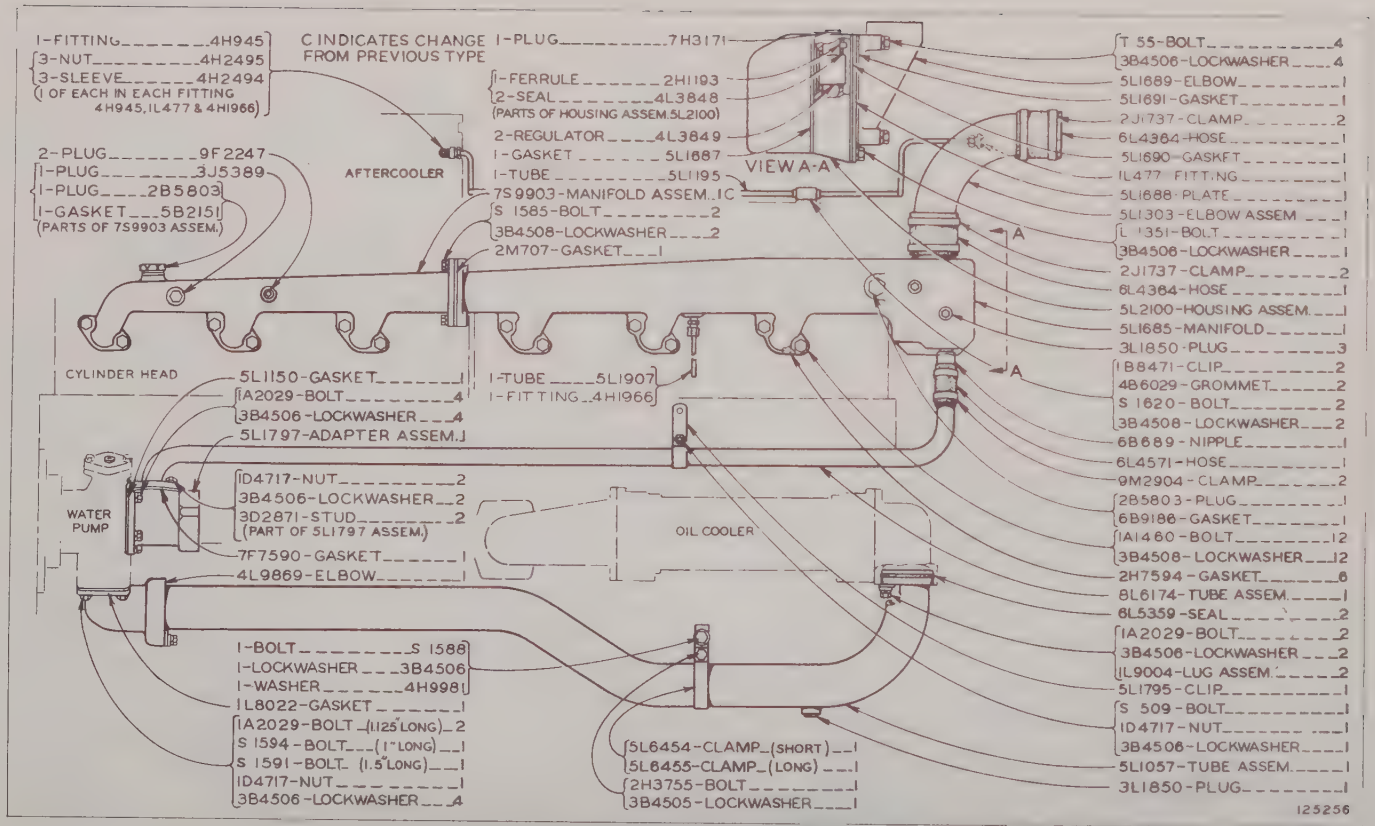
WATER LINES—As Viewed from Right Hand Side of Engine
Serial No. 46B1558 to 46B2482 inclusive and 77B1 to 77B321 inclusive
Refer also to Pages 90 through 93, 119 and 120 for special parts

WATER LINES

Serial No. 46B2483 to 46B2783 inclusive

Refer also to Pages 90 though 93, 119 and 120 for special parts



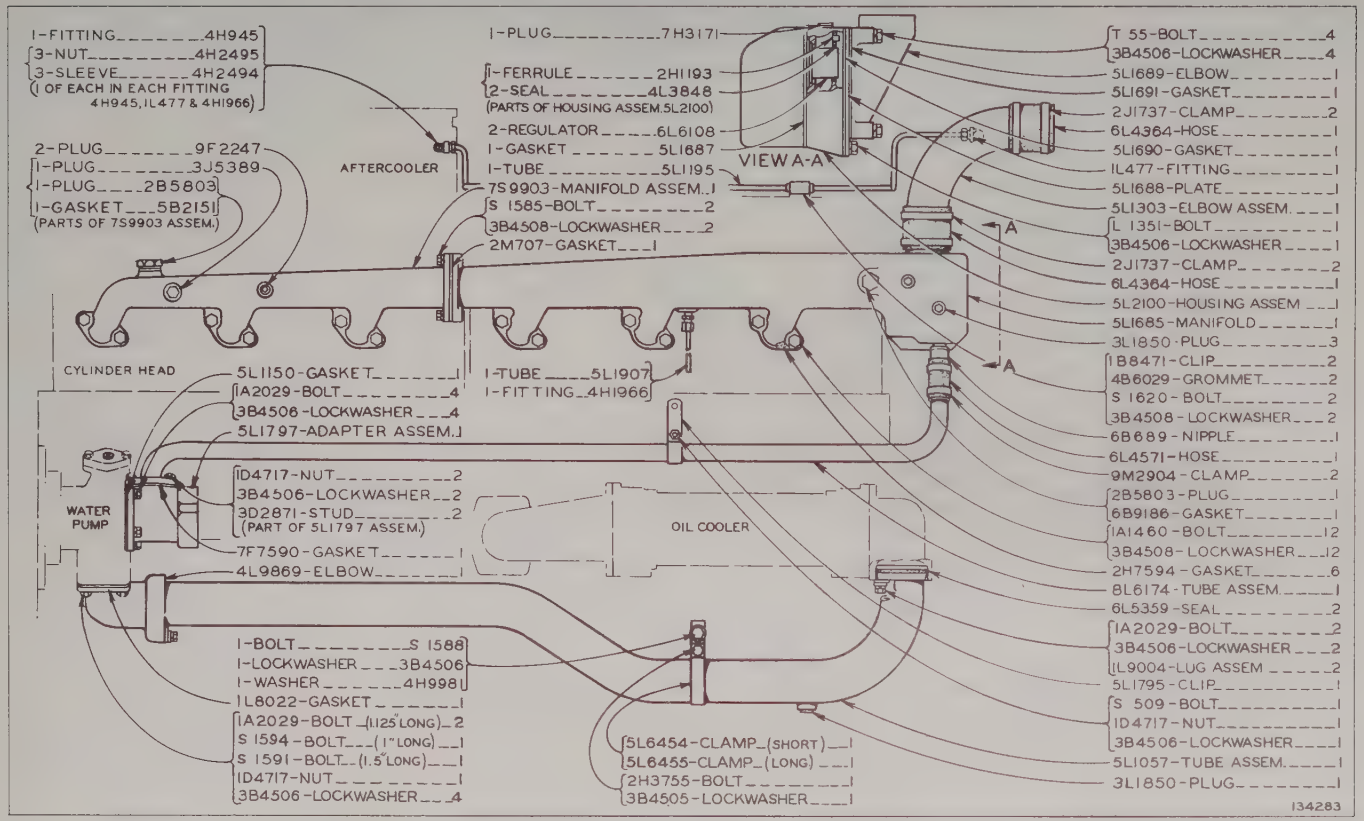


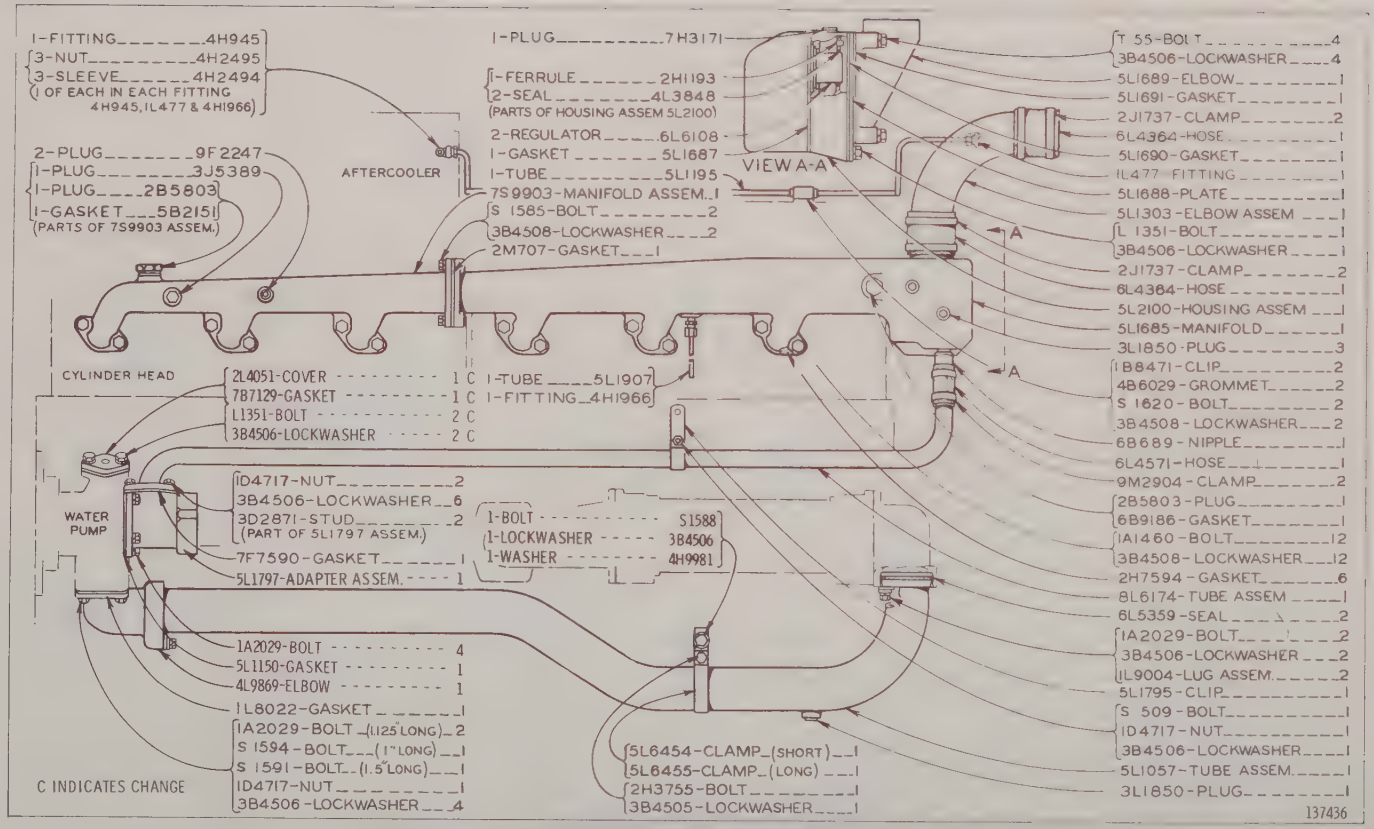
WATER LINES (4L8624 N/S)
Serial No. 46B2784 to 46B3570 inclusive
Refer also to Pages 90 through 93, 119 and 120 for special parts

4L8624 WATER LINES GROUP

Serial No. 46B3571 to 46B3817 inclusive

Note: Refer also to Pages 90 through 93, 119 and 120 for special parts



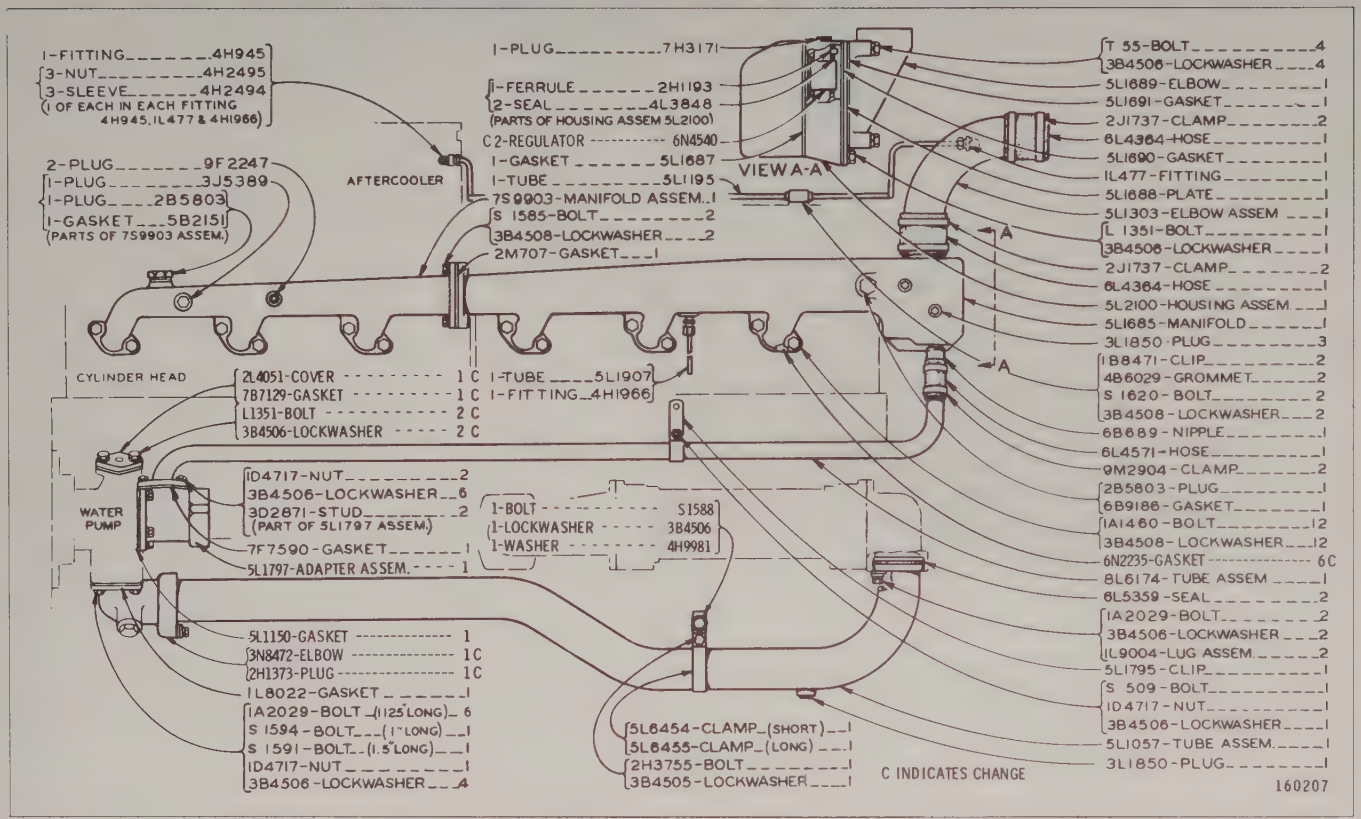


4L8624 WATER LINES GROUP
Serial No. 46B3818 to 46B5660 inclusive
Refer also to Pages 90 through 93, 119 and 120 for special parts

4L8624 WATER LINES GROUP

Serial No. 46B5661 to 46B7925 inclusive

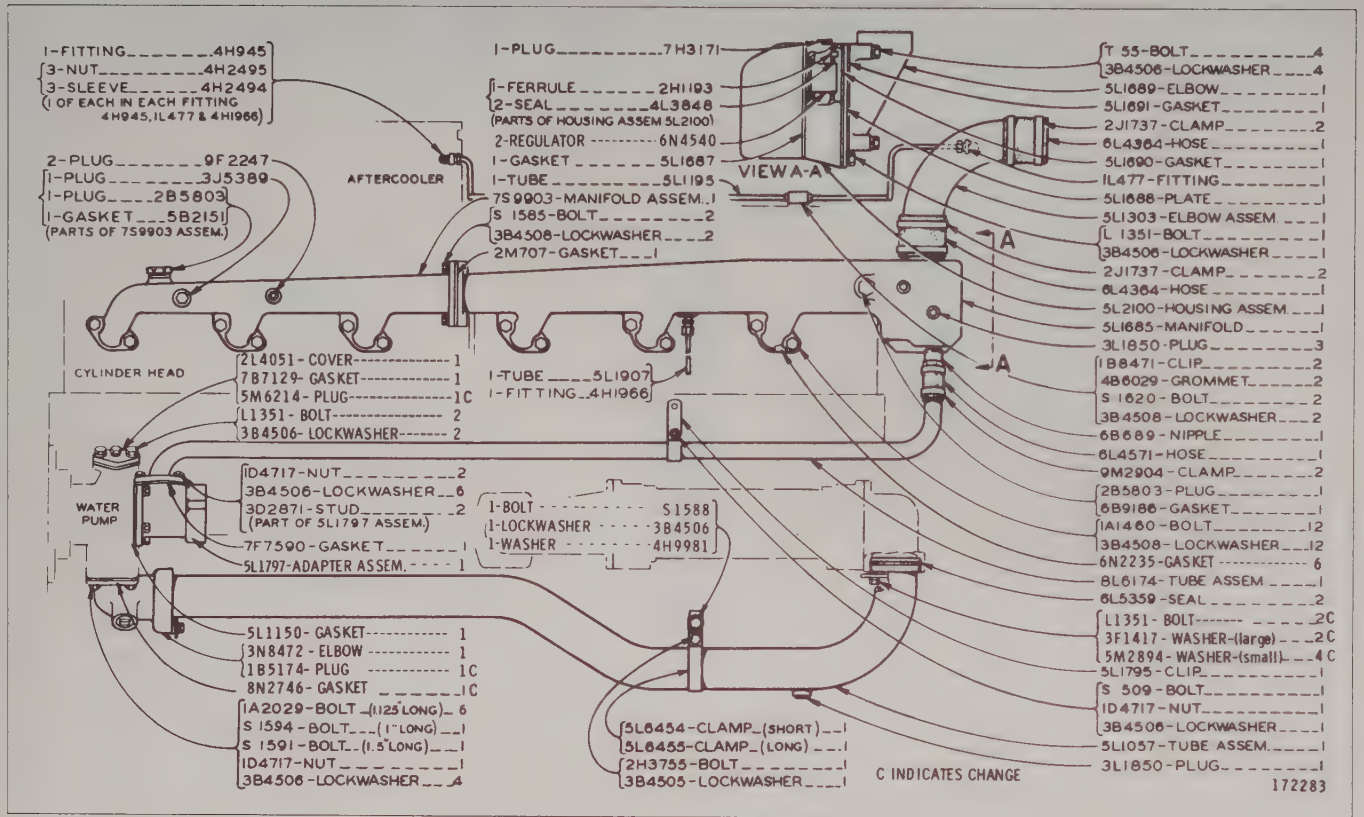
Refer also to Pages 90 through 93, 119 and 120 for special parts

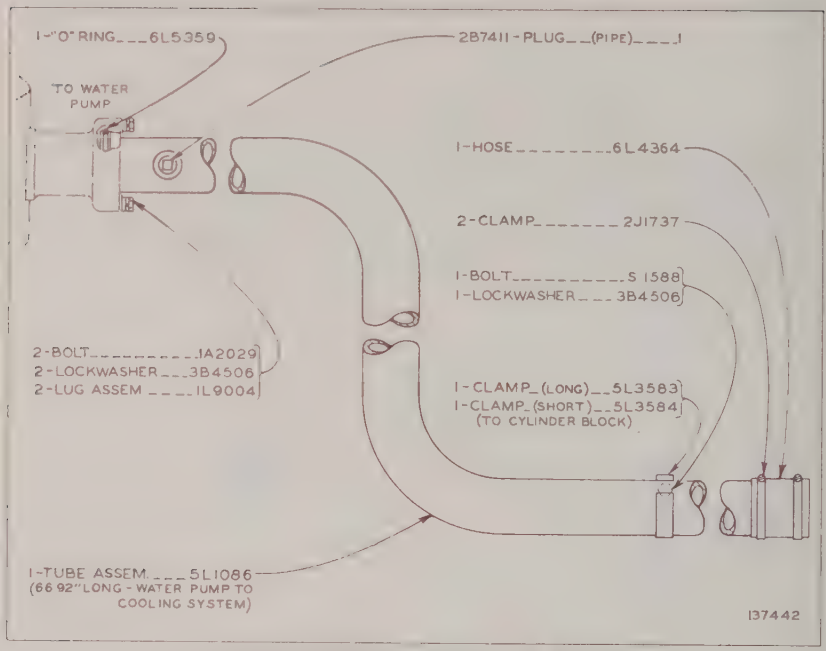


4L8624 WATER LINES GROUP

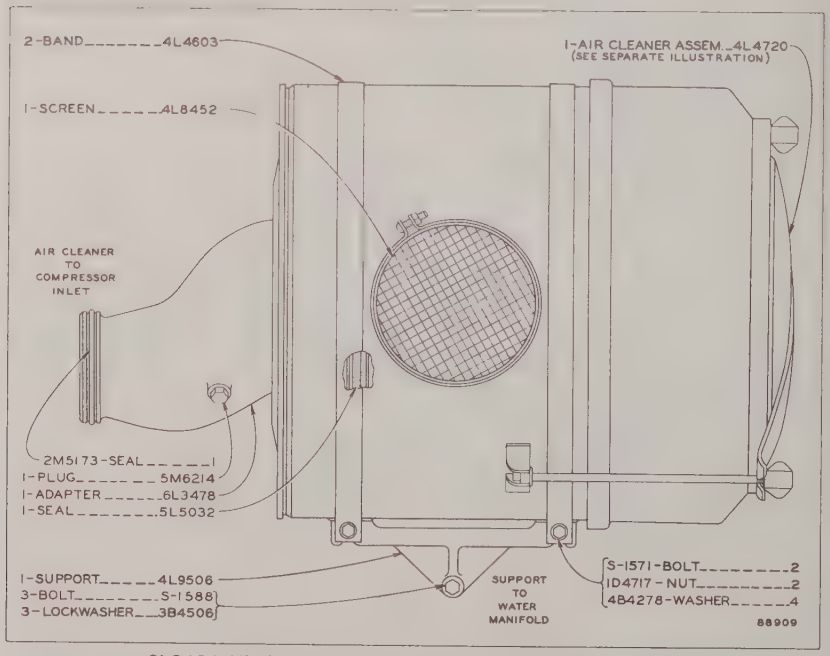
Serial No. 46B7926—Up

Refer also to Pages 90 through 93, 119 and 120 for special parts

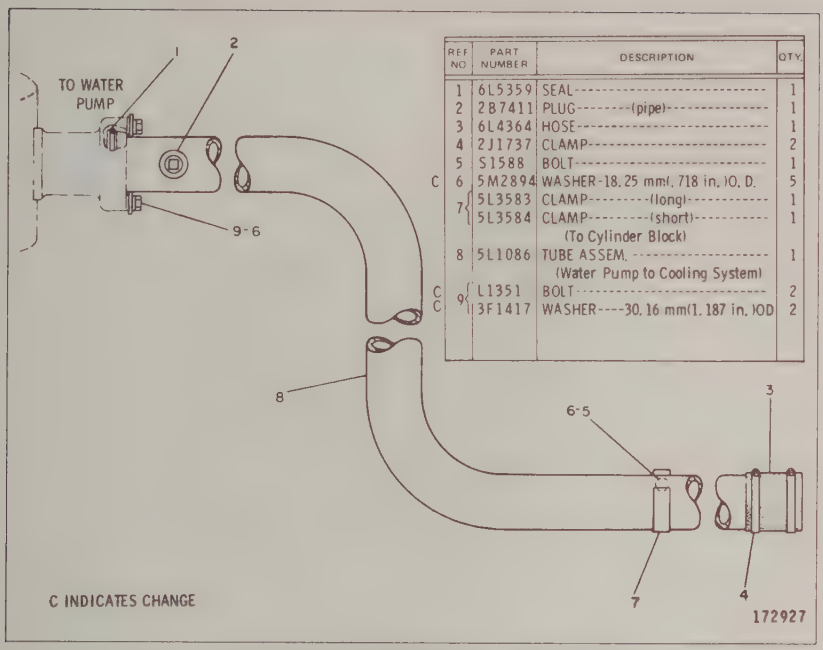




5L3936 WATER PUMP INLET LINE GROUP
Serial No. 46B1558 to 46B6700 inclusive and 77B1—Up
Also available as an Attachment at Serial No. 46B6701—Up

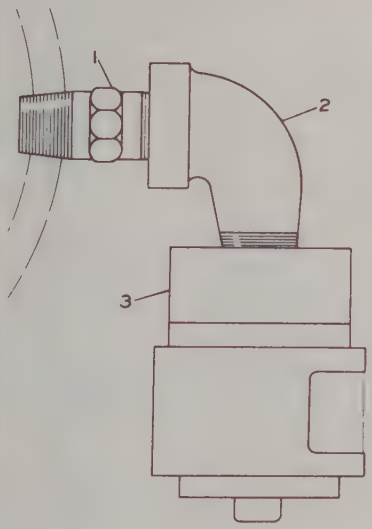


6L3434 AIR CLEANER GROUP—Single Stage—Dry Type
4L4720 Air Cleaner parts are shown on Pages 16B and 17. Note: 4L4795 Air Cleaner Cap Group is available. Refer also to Pages 95 through 98 for special parts



	REF NO	PART NUMBER	DESCRIPTION	QTY
	1	6L5359	SEAL	1
	2	2B7411	PLUG--------(pipe)	1
	3	6L4364	HOSE	1
	4	2J1737	CLAMP	2
	5	S1588	BOLT	1
C	6	5M2894	WASHER-18.25 mm(.718 in.)O.D.	5
	7	5L3583	CLAMP---------(long)	1
		5L3584	CLAMP---------(short)	1
			(To Cylinder Block)	
	8	5L1086	TUBE ASSEM.	1
			(Water Pump to Cooling System)	
C	9	L1351	BOLT	2
C		3F1417	WASHER----30.16 mm(1.187 in.)OD	2

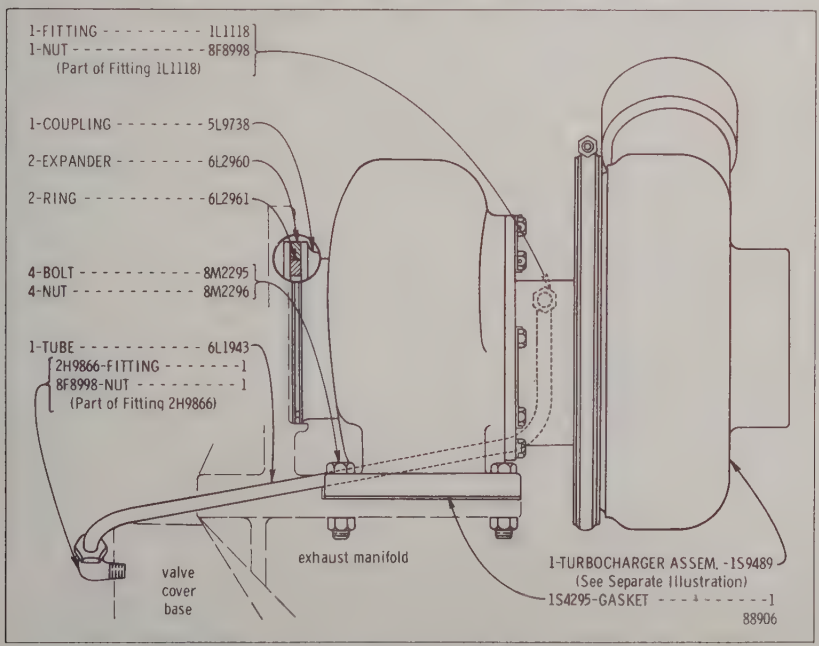
5L3936 WATER PUMP INLET LINES GROUP
Serial No. 46B6701—Up and 77B1—Up
AN ATTACHMENT



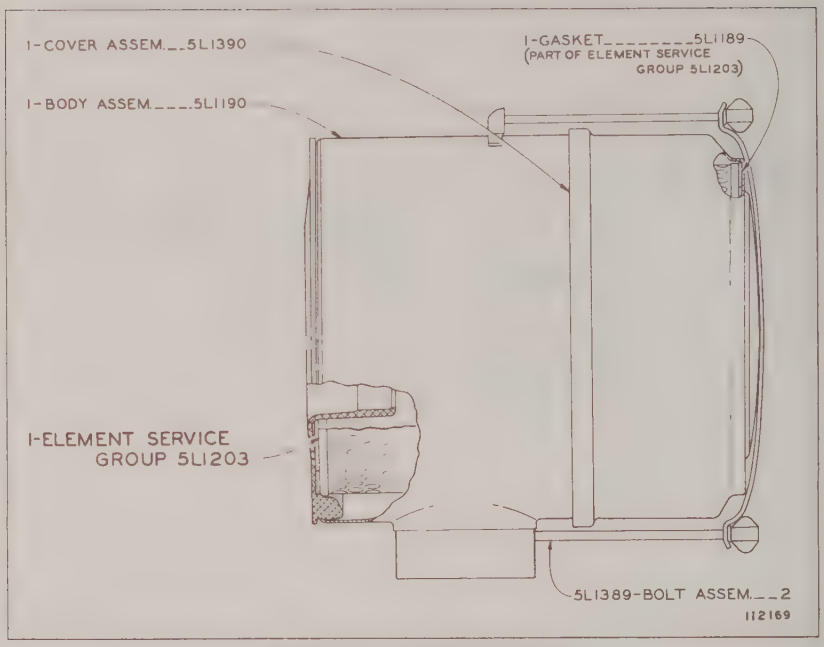
REF. NO.	PART NUMBER	DESCRIPTION	QTY
1	5L3233	FITTING (Safety)	1
2	3B6552	ELBOW	1
3	7S687	INDICATOR	1

140140

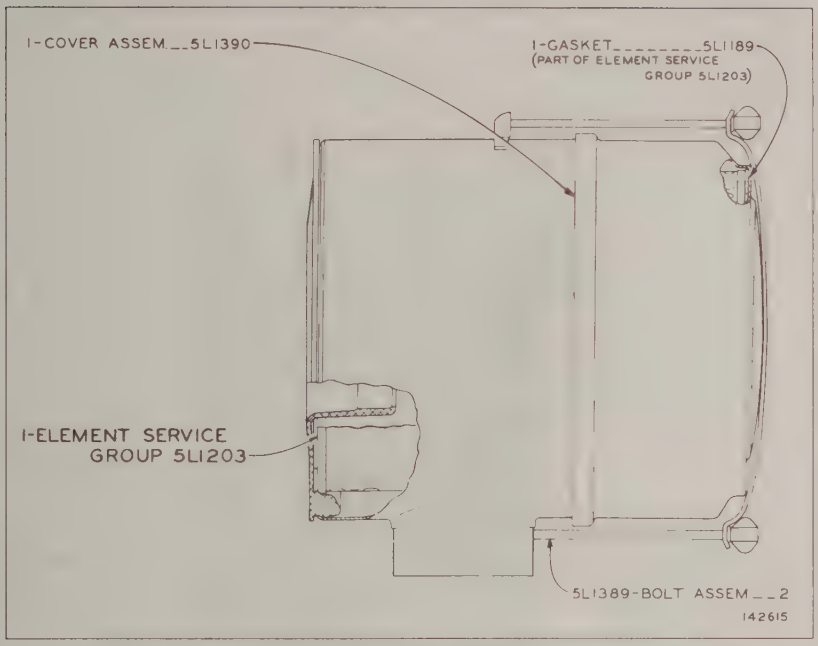
2N3322 AIR FILTER INDICATOR GROUP
Serial No. 46B3293, 3296 to 3308, 3310 to 3321 and 46B3323 to 46B6700 inclusive
Also available as an Attachment at Serial No. 46B6701—Up



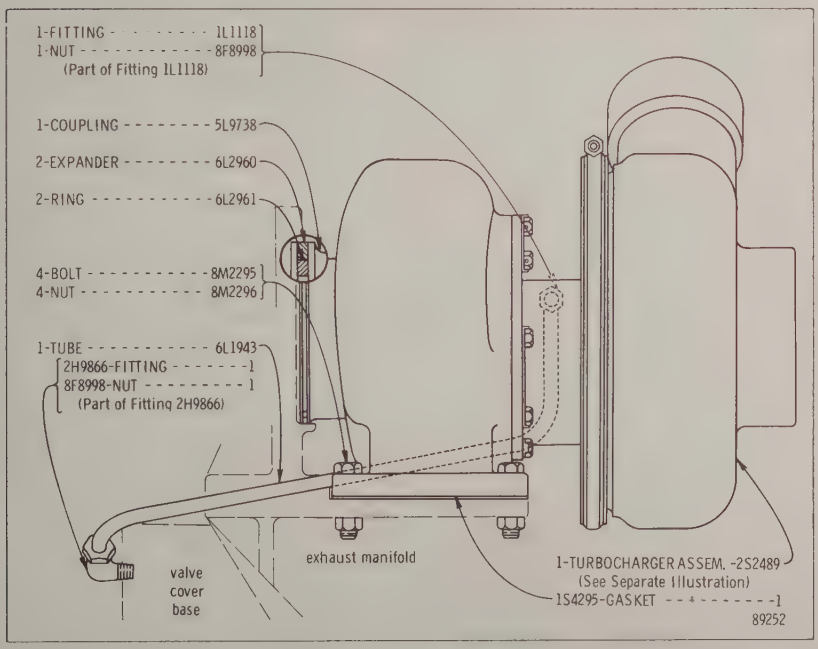
6L3435 TURBOCHARGER GROUP
Serial No. 46B1558 to 46B2055 inclusive and 77B1—Up
1S9489 Turbocharger parts are shown on Page 18
Refer also to Pages 103 through 116 for special parts



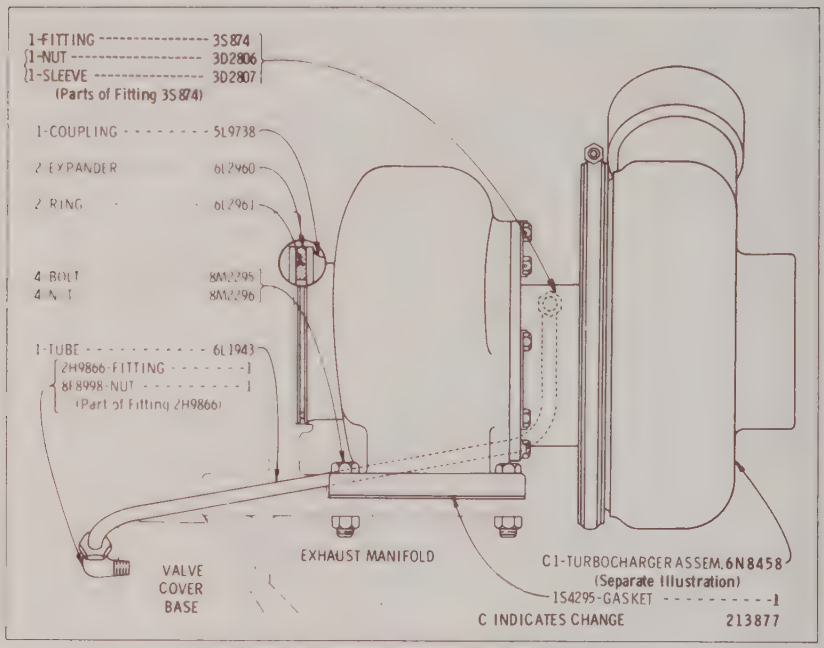
4L4720 AIR CLEANER GROUP
Serial No. 46B1558 to 46B4214 inclusive
Part of Air Cleaner and 2N6684 Air Cleaner shown on Pages 16 and 100S



4L4720 AIR CLEANER GROUP
Serial No. 46B4215—Up. Part of 6L3434 and 2N6684 Air Cleaner Groups shown on Pages 16 and 100S



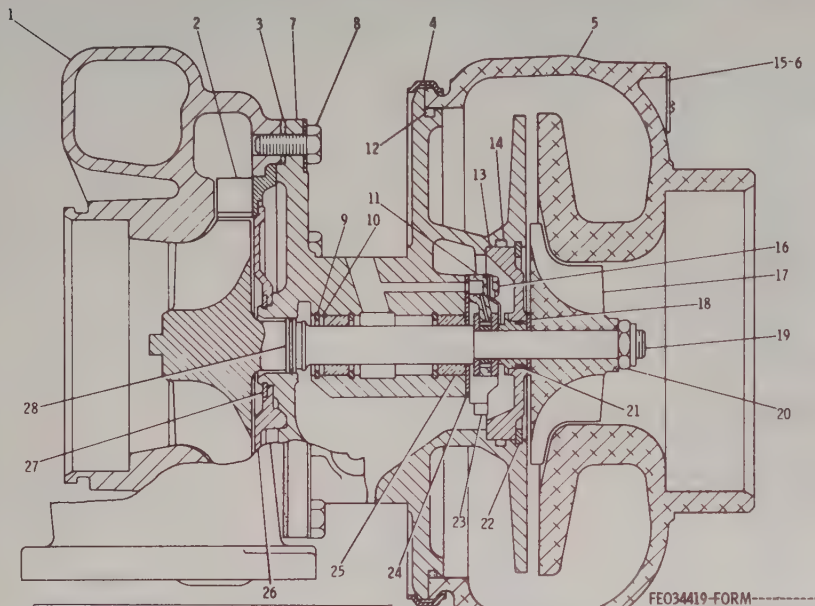
6L5685 TURBOCHARGER GROUP—Type 1
Serial No. 46B2056—Up. 2S2489 Turbocharger parts are shown on Pages 104E and 105
Also available as an attachment from Serial No. 46B1514 to 46B2055 inclusive



6L5685 TURBOCHARGER GROUP—Type 2
Serial No. 46B2056—Up. Also available as an attachment from
Serial No. 46B1514 to 46B2055 inclusive

6N8458 TURBOCHARGER GROUP

Serial No. 46B2056—Up
Also available as an attachment from Serial No. 46B1514 to 46B2055 inclusive
Part of 6L5685 Turbocharger Group



REF. NO	PART NUMBER	DESCRIPTION	QTY
1	6N8453	HOUSING--------(turbine)----------	1
2	9M9928	NOZZLE----------	1
3	4N4044	GASKET----------	1
4	2S1304	CLAMP----------	1
	7M9918	NUT----------	1

5	8S4048	COVER---------(compressor)-----	1
6	7M9920	PLATE--------(name)----------	1
	8H3710	SCREW----------	2

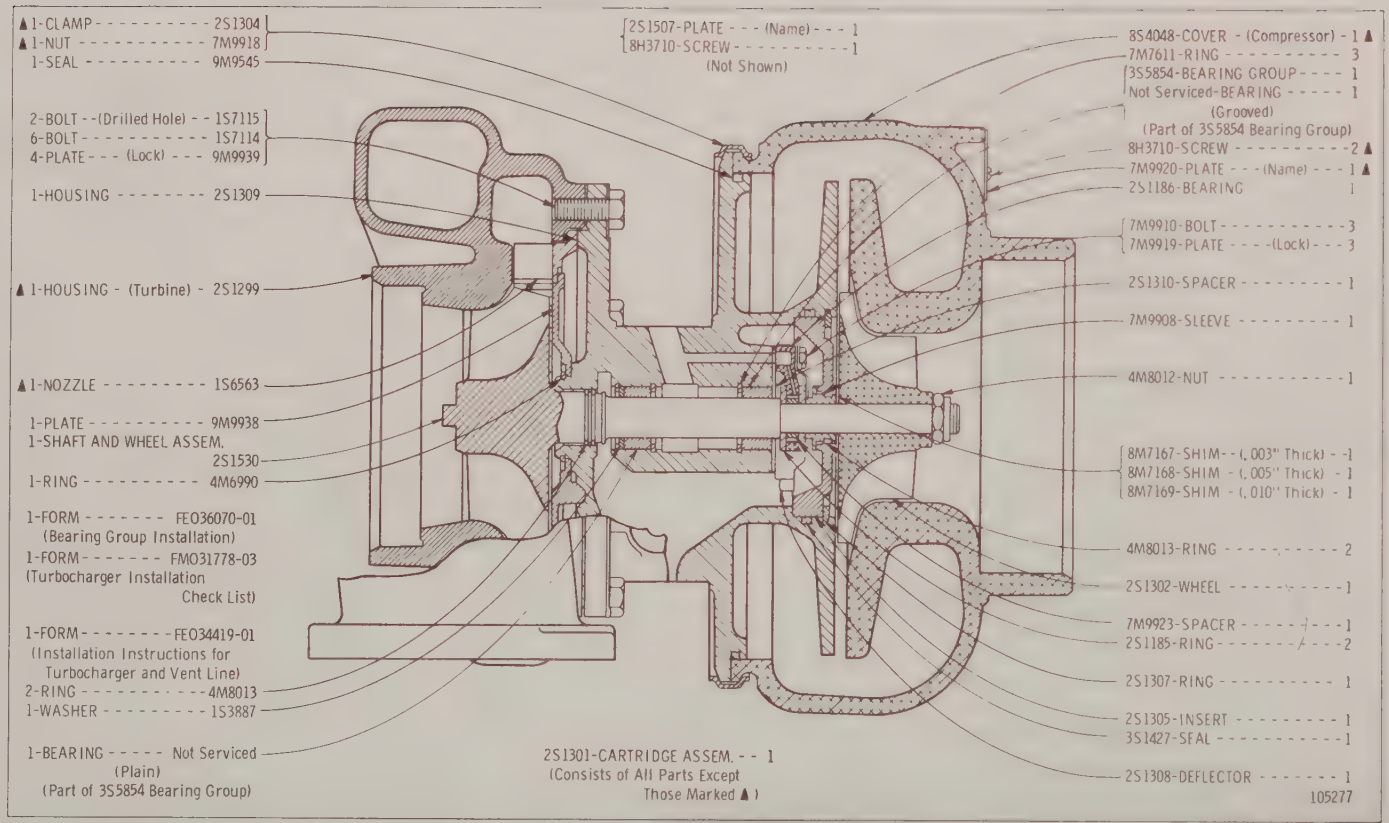
FE034419-FORM----------1
(Installation instructions for turbocharger and vent line)
SMHS6776-FORM----------1
(kit installation)

7	4N4040	CARTRIDGE ASSEM. (Includes) ----------	1
	4N4042	HOUSING----------	1
8	1S7114	BOLT----------	8
	9M9939	PLATE--------(lock)----------	4
▲ 9	7M7611	RING----------	3
▲10	1S3887	SPACER----------	1
	2S1186	BEARING----------	1
11	2S1185	RING----------	2
▲	7M9923	SPACER----------	1
▲12	9M9545	SEAL----------	1
13	2S1305	INSERT----------	1
▲14	3S1427	SEAL----------	1
15	2S1507	PLATE----------(name)-------	1
	8H3710	SCREW----------	1
16	7M9910	BOLT----------	3
▲	7M9919	PLATE--------(lock)----------	3
17	2S1302	WHEEL----------	1
▲	8M7167	SHIM--.076 mm(.003 in.) thick	1
▲18	8M7168	SHIM--.127 mm(.005 in.) thick	1
▲	8M7169	SHIM--.254 mm(.010 in.) thick	1
19	2S1530	SHAFT AND WHEEL ASSEM. -----	1
▲20	6N9683	NUT----------	1
▲	4M8013	RING----------	1
▲21	7M9908	SLEEVE----------	1
▲22	2S1307	RING----------	1
▲23	2S1308	DEFLECTOR----------	1
▲24	2S1310	SPACER----------	1
▲25	3S5854	BEARING GROUP---------- (Includes Plain & Grooved Bearing)	1
26	9M9938	PLATE----------	1
▲27	4M6990	RING----------	1
▲28	4S9248	RING----------	2
	FE036070	FORM--(Bearing Group Installation)	1

THE FOLLOWING REPAIR KIT IS AVAILABLE:

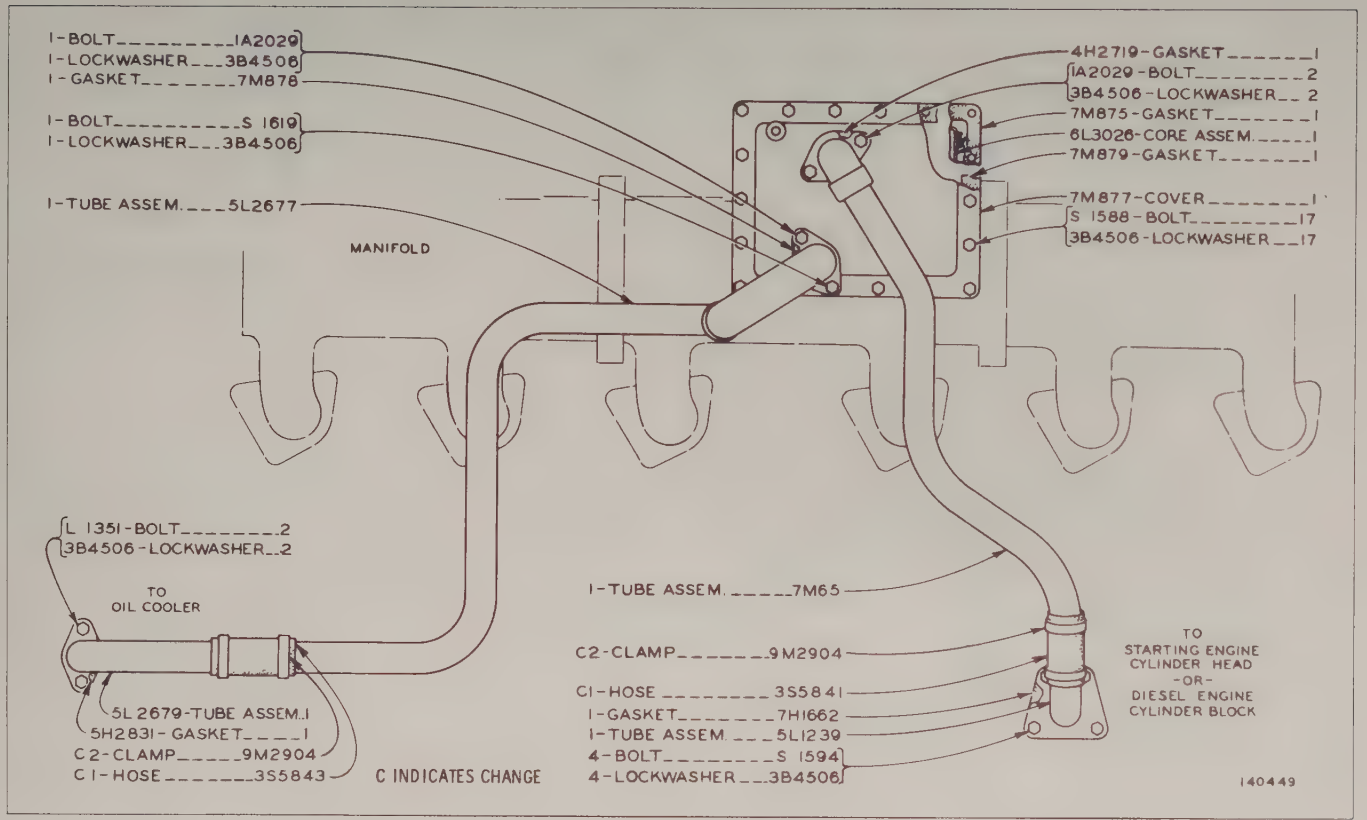
	6N7244	KIT---------(cartridge)---------- (Includes parts marked ▲)	1

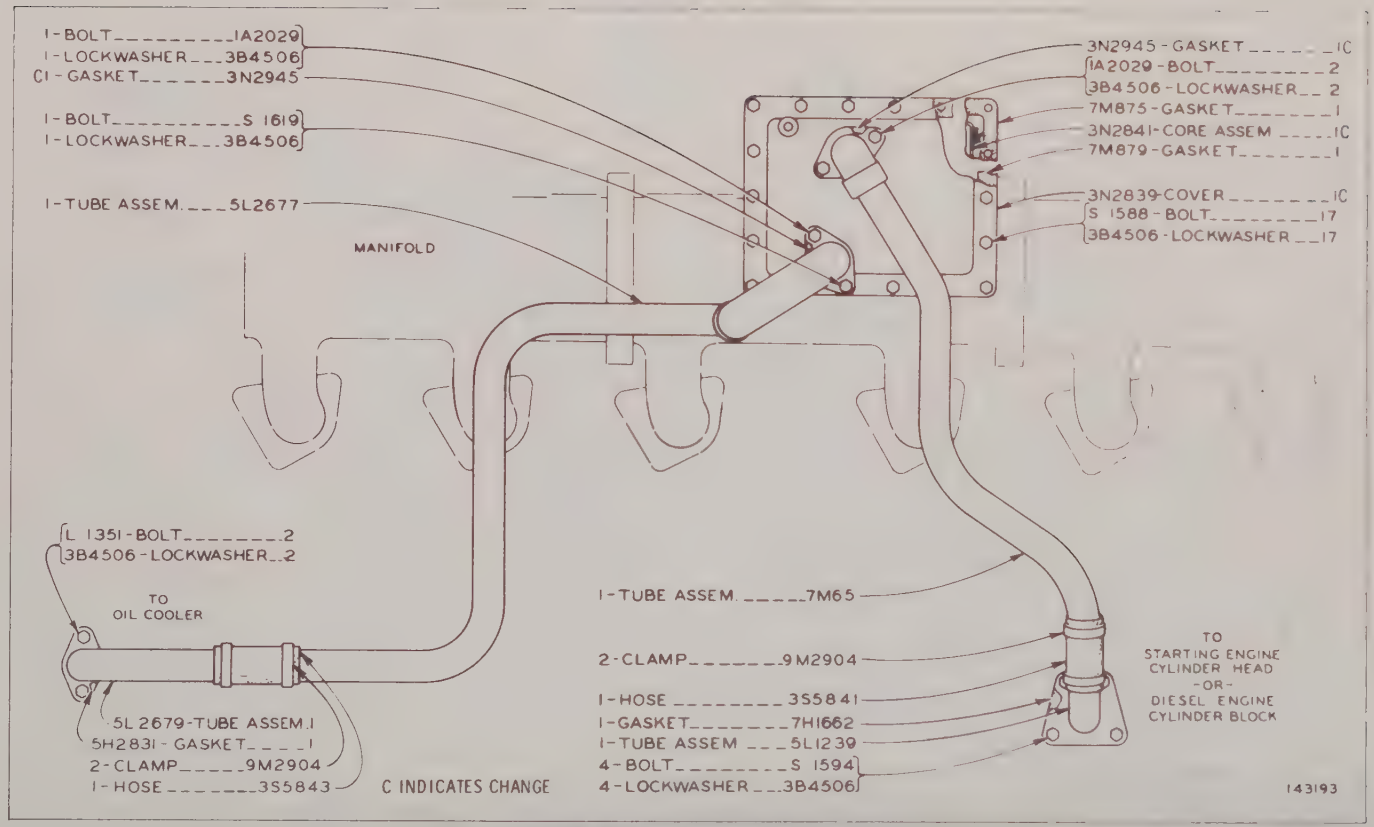
213878



1S9489 TURBOCHARGER ASSEMBLY
Replaced by 6N8463 shown on Page 116A
Serial No. 46B1558 to 46B2055 inclusive and 77B1—Up
Part of 6L3435 Turbocharger Group shown on Page 16A

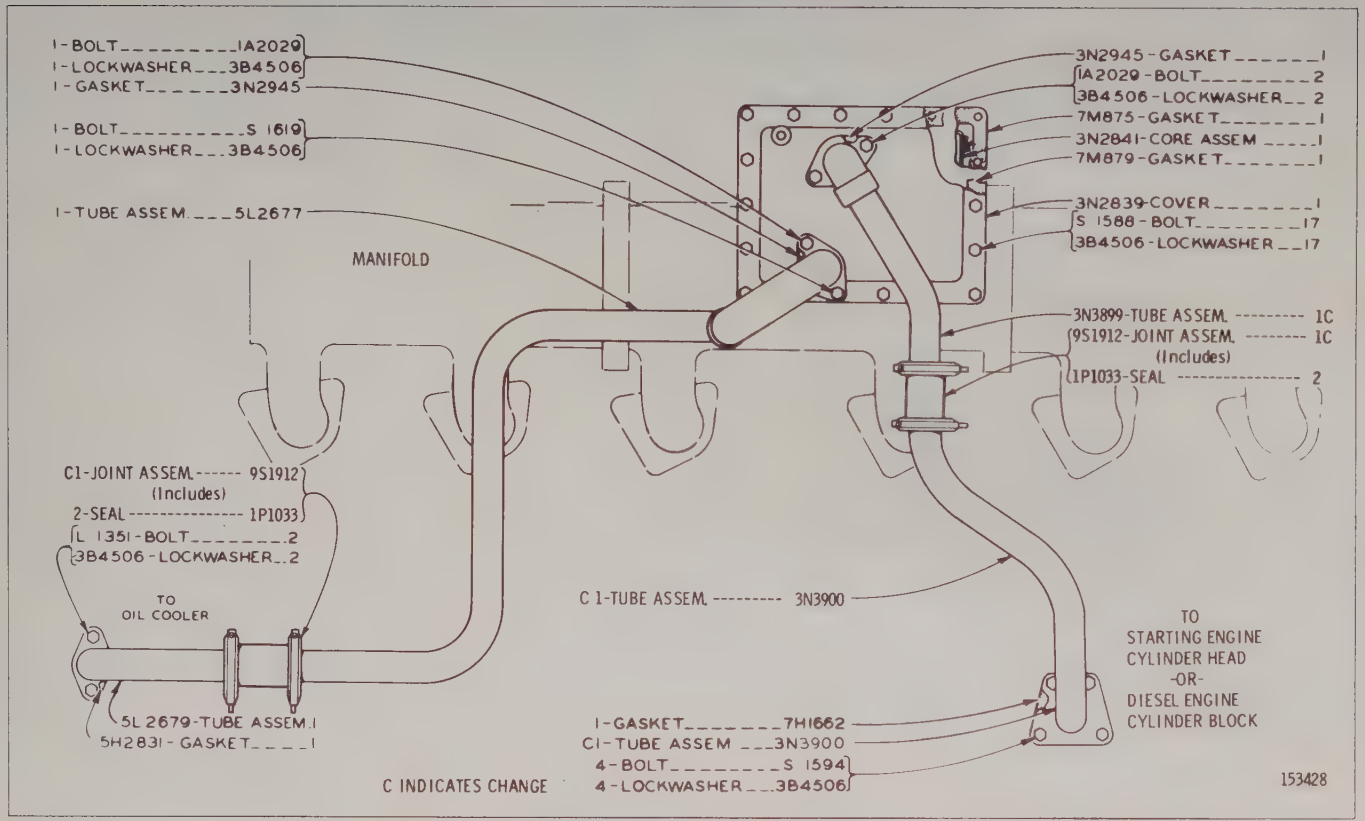
4L8619 AFTERCOOLER GROUP
Serial No. 46B1558 to 46B4264 inclusive

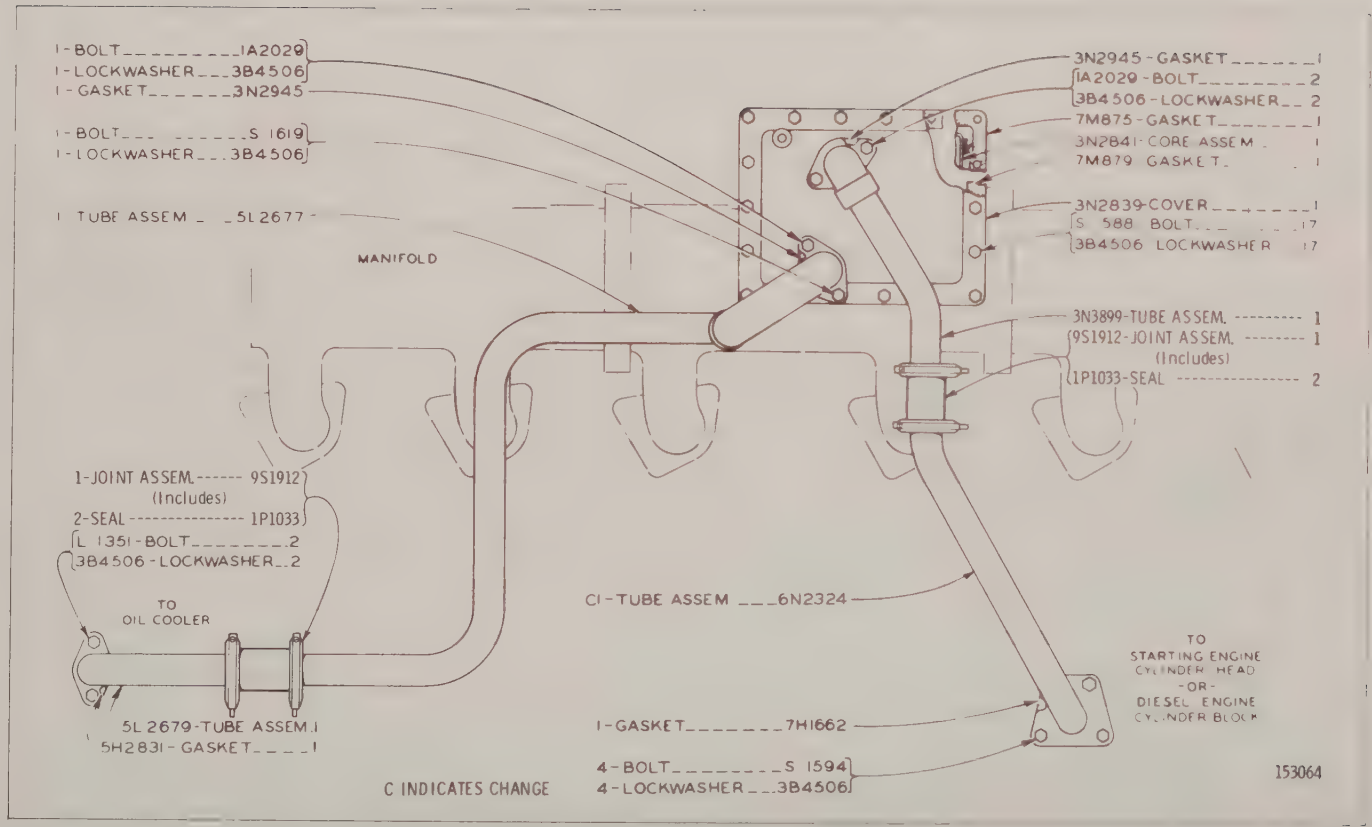




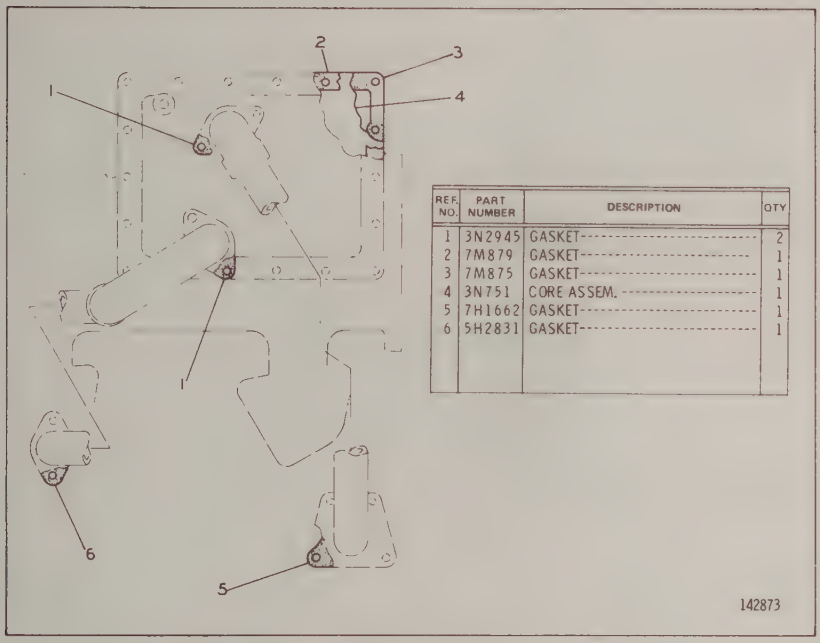
4L8619 AFTERCOOLER GROUP
Serial No. 46B4265 to 46B4470 inclusive

4L8619 AFTERCOOLER GROUP
Serial No. 46B4471 to 46B5064 inclusive



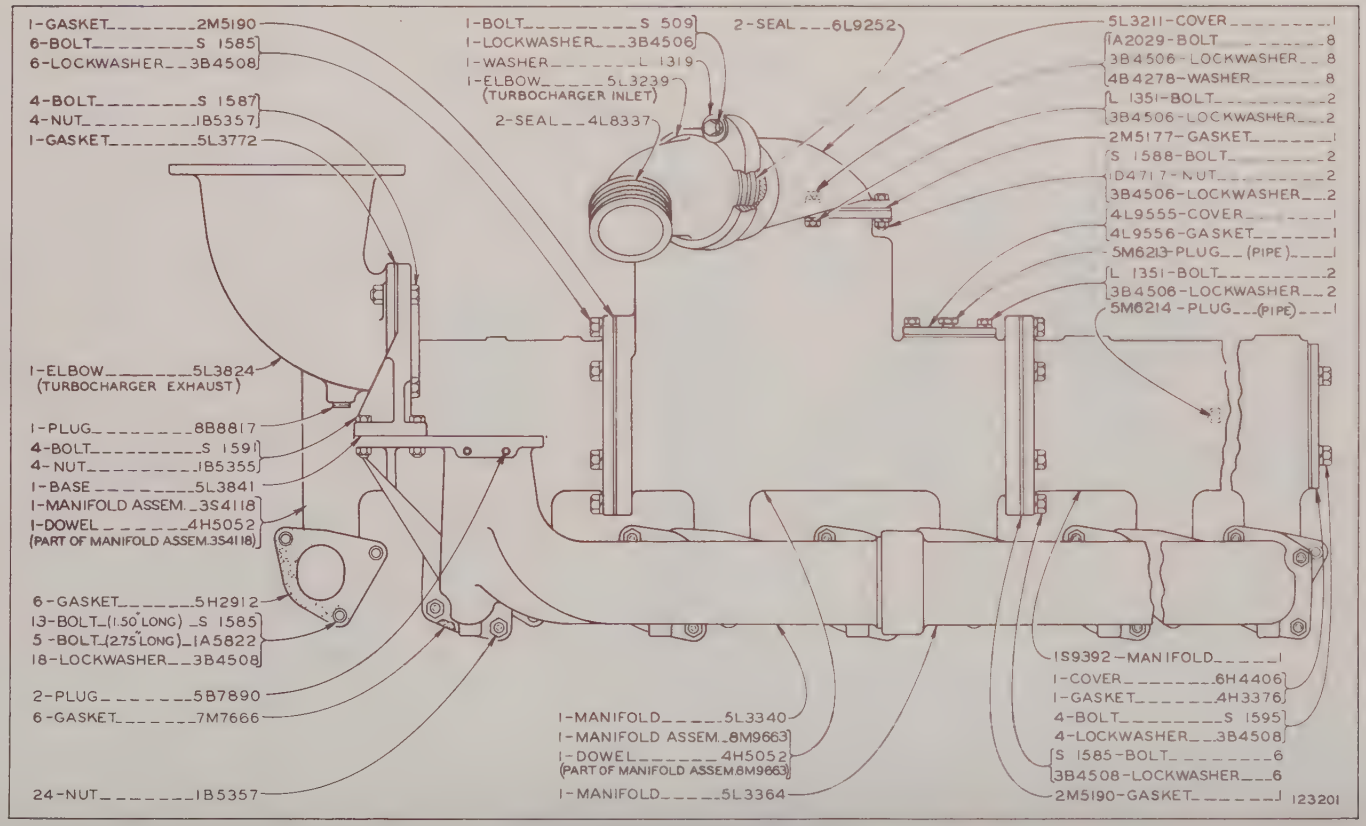


4L8619 AFTERCOOLER GROUP
Serial No. 46B5065—Up



REF. NO.	PART NUMBER	DESCRIPTION	QTY
1	3N2945	GASKET	2
2	7M879	GASKET	1
3	7M875	GASKET	1
4	3N751	CORE ASSEM.	1
5	7H1662	GASKET	1
6	5H2831	GASKET	1

3N6633 SEA WATER AFTERCOOLER GROUP
PROVIDES COPPER NICKEL AFTERCOOLER CORES FOR
USE WITH JACKET WATER COOLING. AN ATTACHMENT

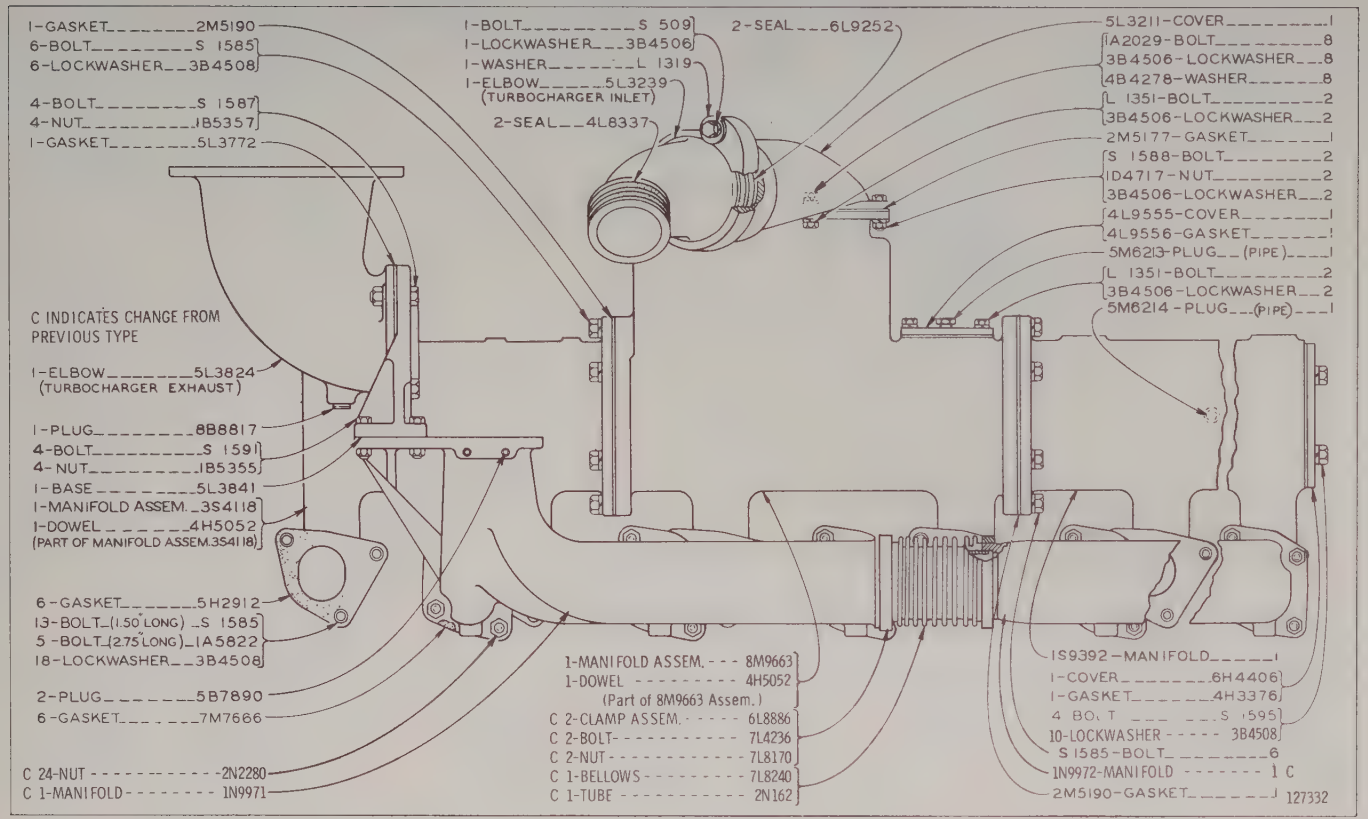


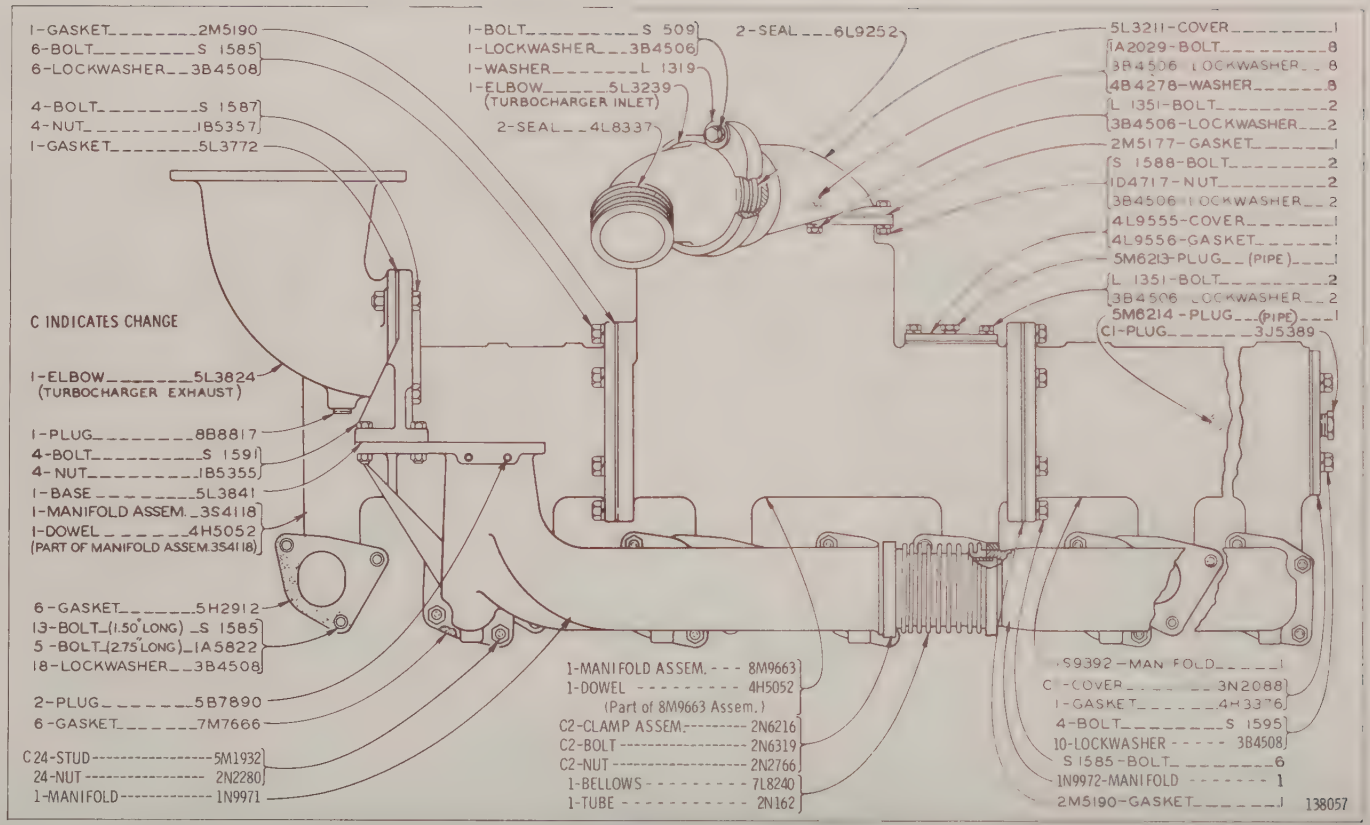
MANIFOLDS (4L8623 N/S)
Serial No. 46B1558 to 46B3126 inclusive
Refer also to Pages 99 through 102 for special parts

4L8623 MANIFOLD GROUP

Serial No. 46B3127 to 46B3589 inclusive

Refer also to Pages 99 through 102 for special parts



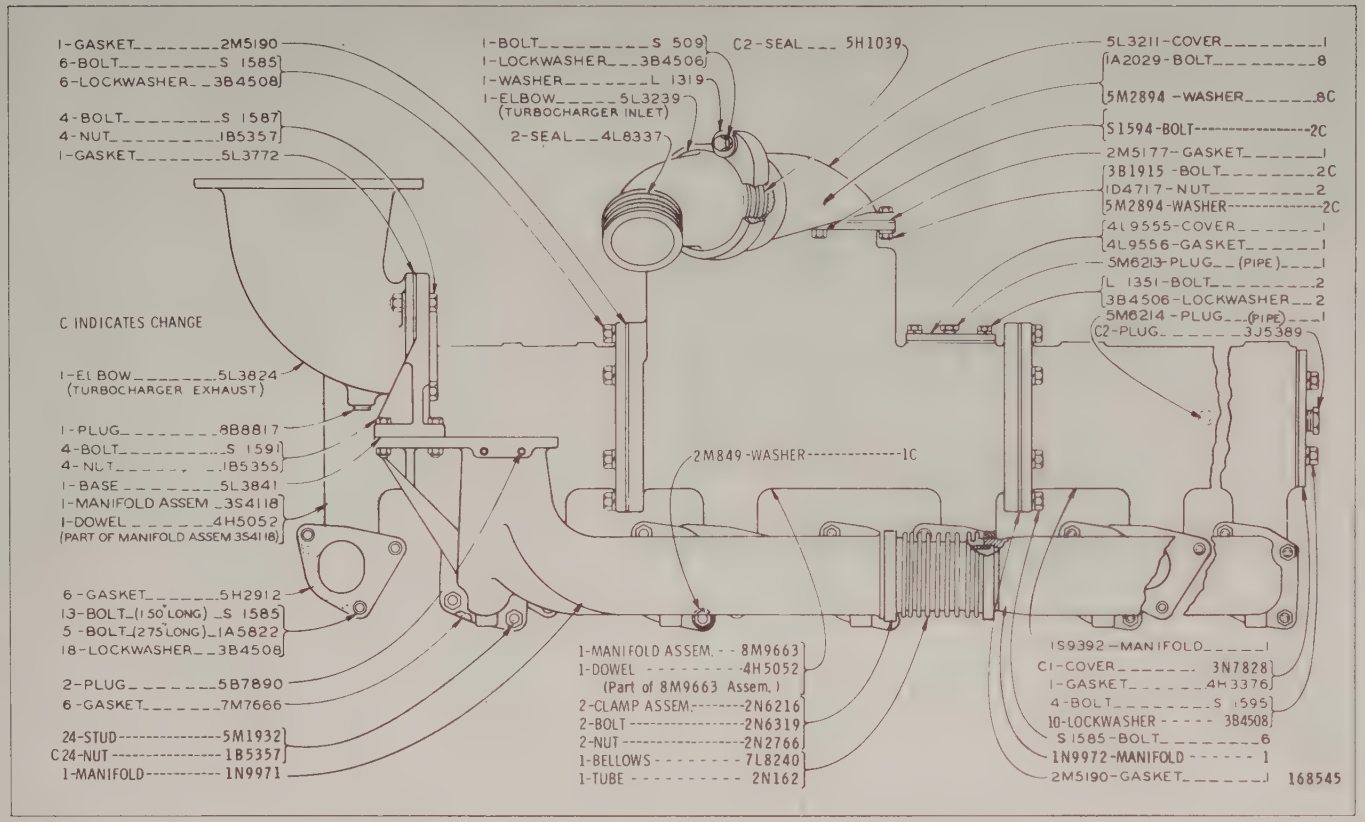


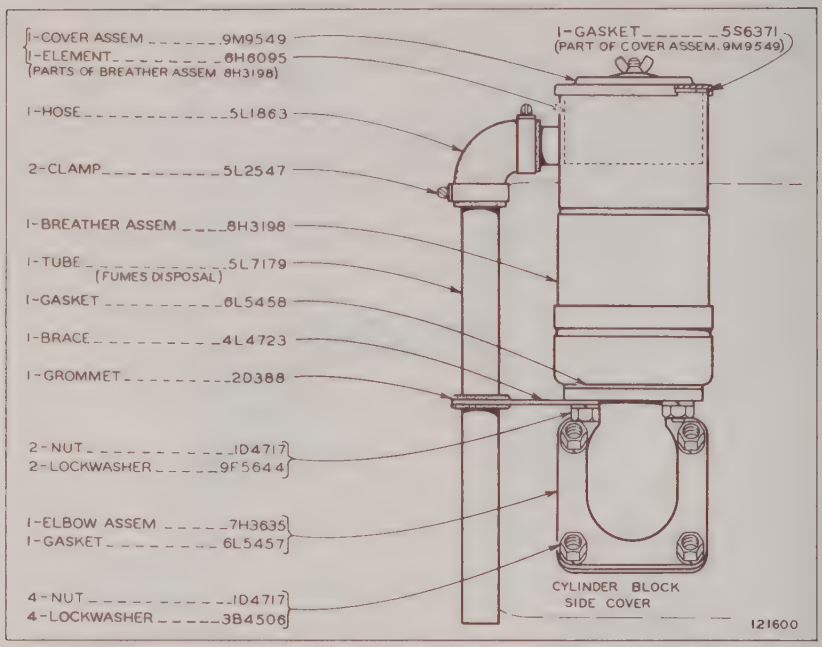
4L8623 MANIFOLD GROUP
Serial No. 46B3590 to 46B6409 inclusive
Refer also to Pages 99 through 102 for special parts

4L8623 MANIFOLD GROUP

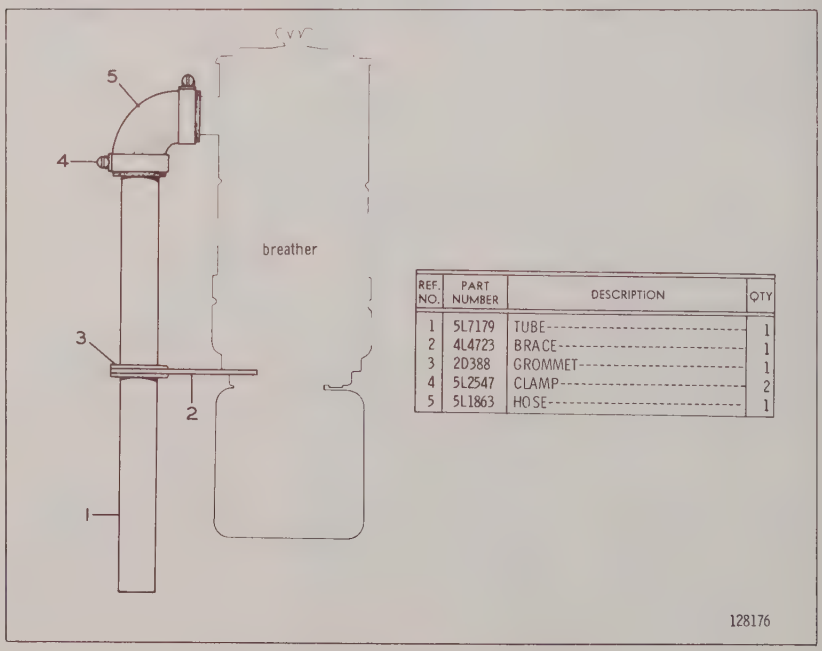
Serial No. 46B6410—Up

Refer also to Pages 99 through 102 for special parts



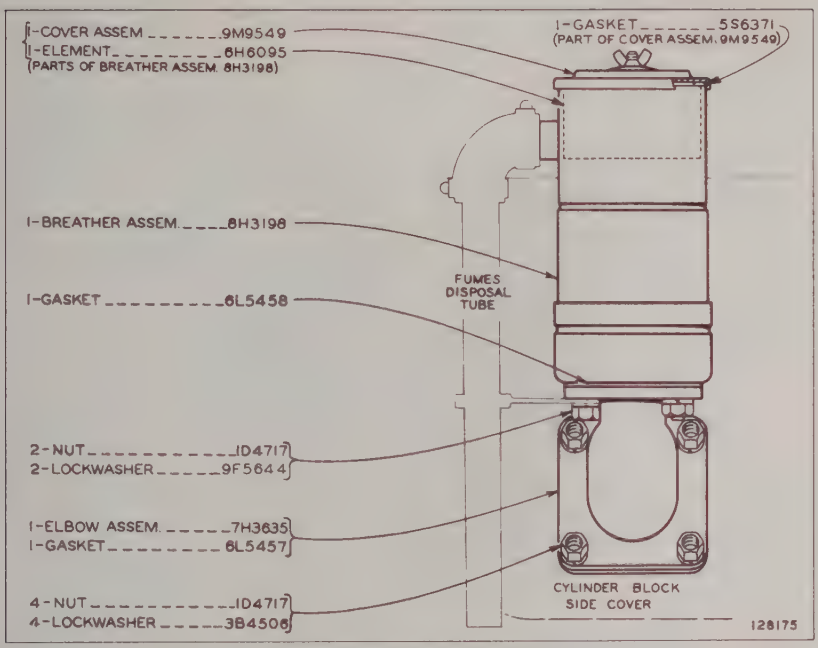


6H1672 BREATHER AND FUMES DISPOSAL TUBE GROUP
Serial No. 46B1558 to 46B3045 inclusive

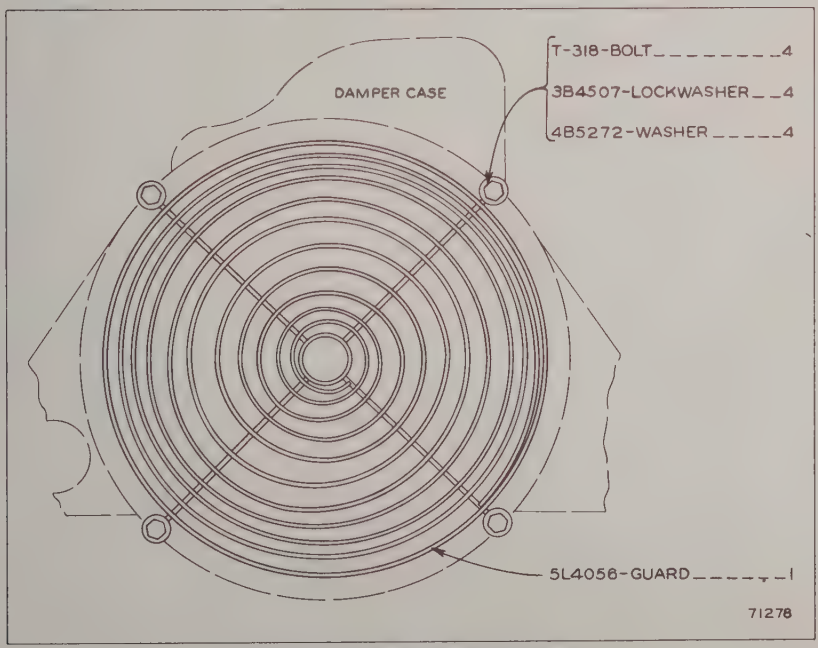


REF. NO.	PART NUMBER	DESCRIPTION	QTY
1	5L7179	TUBE	1
2	4L4723	BRACE	1
3	2D388	GROMMET	1
4	5L2547	CLAMP	2
5	5L1863	HOSE	1

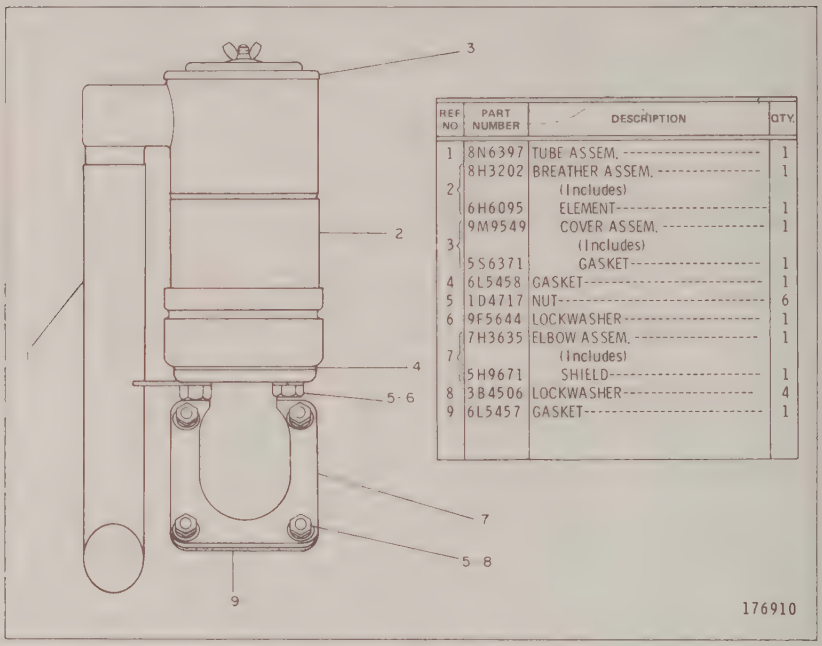
2N1814 FUMES DISPOSAL TUBE GROUP
Serial No. 46B3046—Up



6H1672 BREATHER GROUP
Serial No. 46B3046 to 46B8329 inclusive

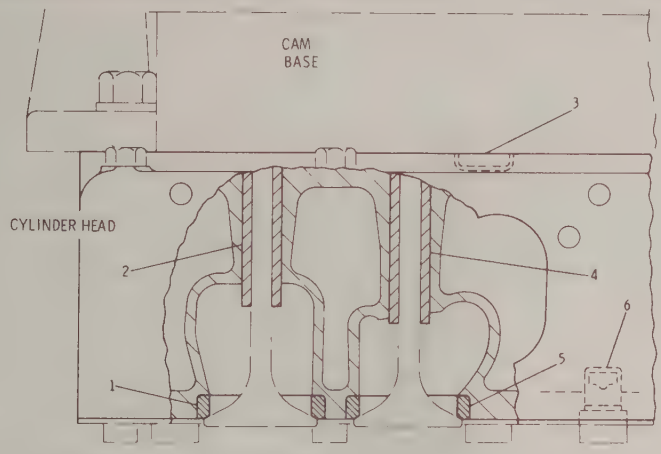


2L7109 DAMPER GUARD GROUP
Serial No. 46B1558 to 46B6700 inclusive
Also available as an Attachment at Serial No. 46B6701—Up



REF NO	PART NUMBER	DESCRIPTION	QTY.
1	8N6397	TUBE ASSEM.	1
2	8H3202	BREATHER ASSEM. (Includes)	1
	6H6095	ELEMENT	1
3	9M9549	COVER ASSEM. (Includes)	1
	5S6371	GASKET	1
4	6L5458	GASKET	1
5	1D4717	NUT	6
6	9F5644	LOCKWASHER	1
7	7H3635	ELBOW ASSEM. (Includes)	1
	5H9671	SHIELD	1
8	3B4506	LOCKWASHER	4
9	6L5457	GASKET	1

8N6398 BREATHER GROUP
Serial No. 46B8330—Up

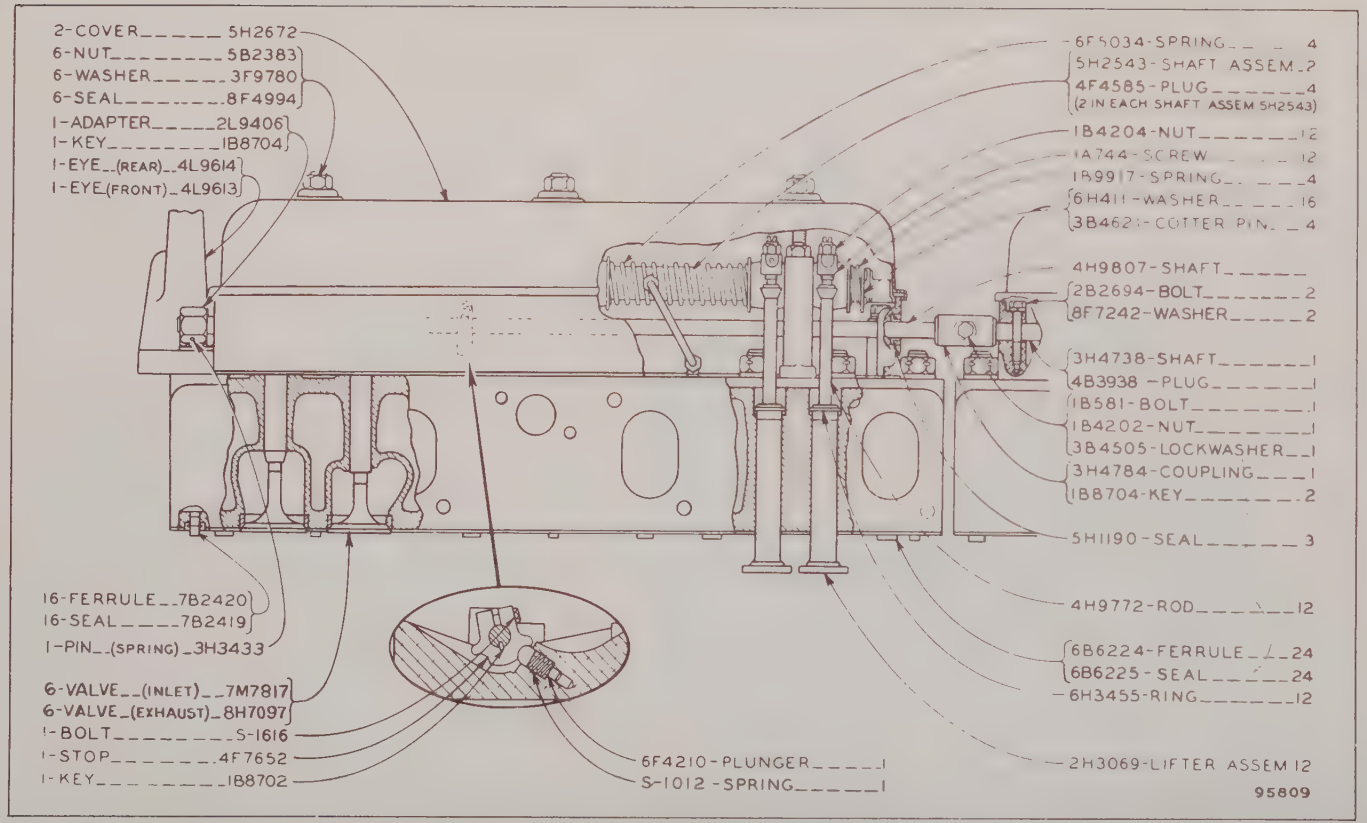


REF. NO.	PART NUMBER	DESCRIPTION	QTY
	5S1757	INSERT--------(intake)----------	3
▲ 1	4S8908	INSERT---. 127 mm(. 005 in.) O. S.	3
▲	4S8909	INSERT---. 254 mm(. 010 in.) O. S.	3
2	4N3664	GUIDE----------(intake)-------	3
3	3B645	PLUG----------	12
4	6N8847	GUIDE--------(exhaust)---------	3
	8M4014	INSERT-------(exhaust)---------	3
▲ 5	4S8906	INSERT-------. 127 mm(. 005 in.)O. S.	3
▲	4S8907	INSERT-------. 254 mm(. 010 in.)O. S.	3
6	5H7071	DIRECTOR----------	12

▲ NOT PART OF 7N6340 ASSEM. -O. S. = OVERSIZE

215430

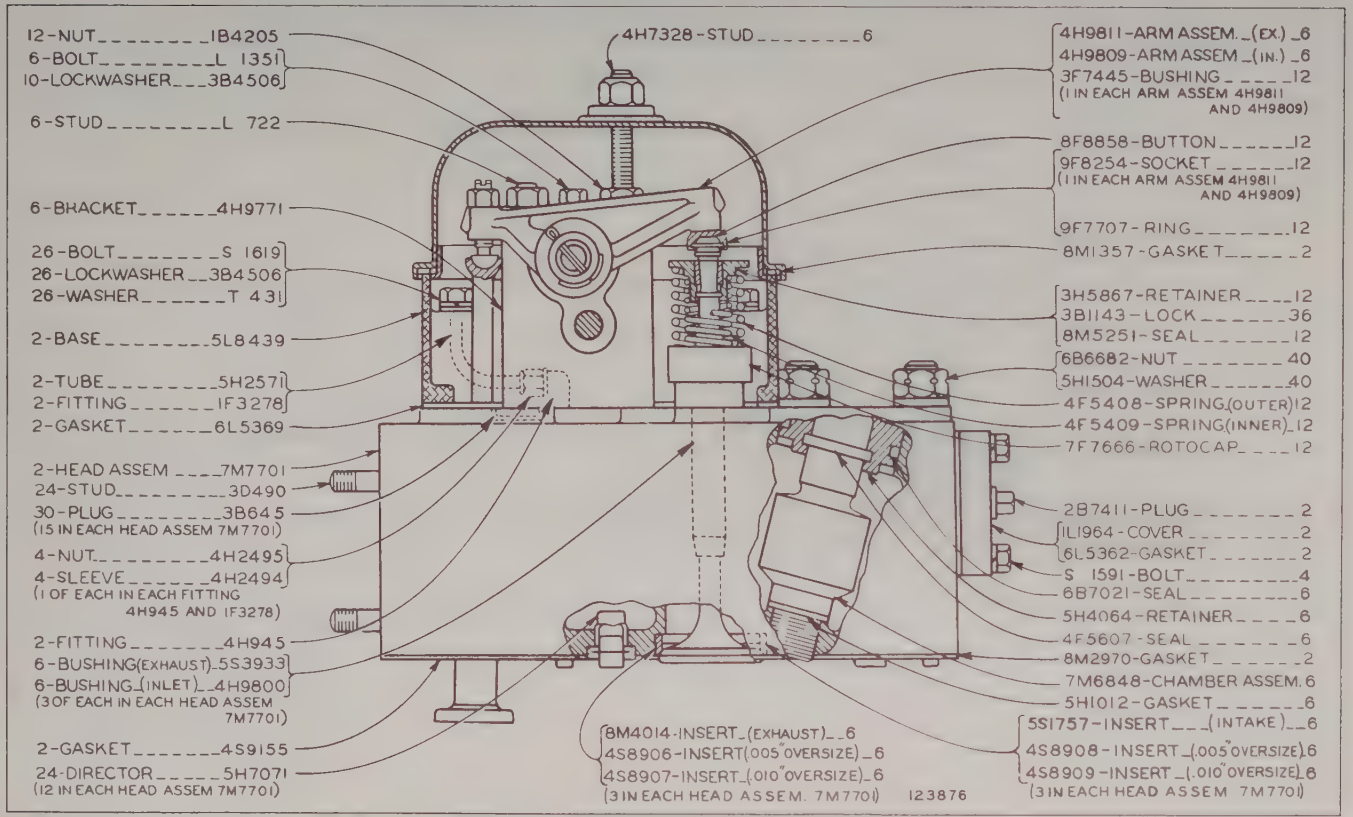
7N6340 CYLINDER HEAD ASSEMBLY
Serial No. 46B4437 to 46B6446 inclusive. Provides Field Replacement for 4N7093 Head Assembly shown on Pages 23B and 23D

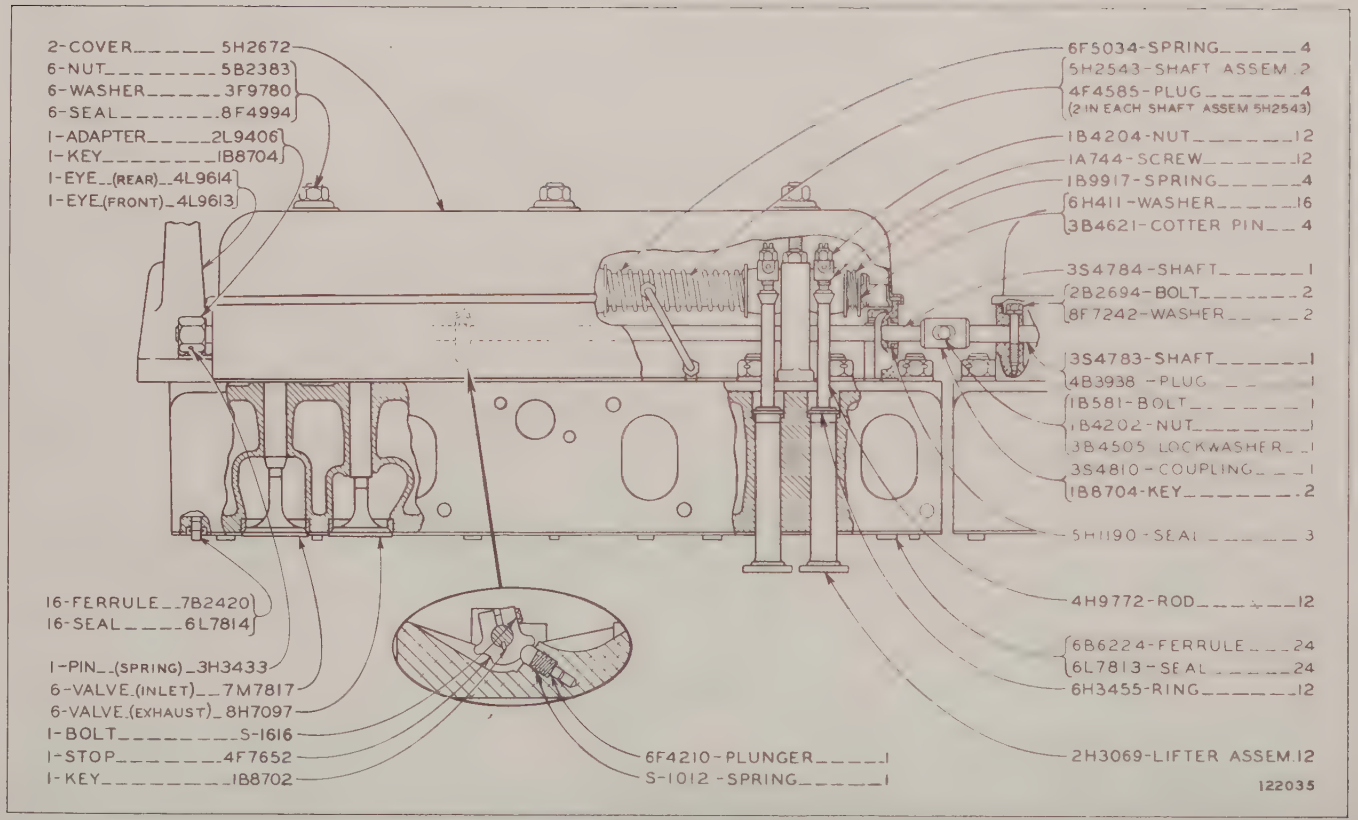


CYLINDER HEAD AND VALVE MECHANISM--SIDE VIEW
SERIAL NO. 46B1558 TO 46B1901 INCLUSIVE AND 77B1 TO 77B135 INCLUSIVE
SEE PAGE 32 FOR GASKET KIT. REFER ALSO TO PAGE 73 FOR SPECIAL PARTS

CYLINDER HEAD AND VALVE MECHANISM--END VIEW

SERIAL NO. 46B1558 TO 46B1901 INCLUSIVE AND 77B1 TO 77B135 INCLUSIVE

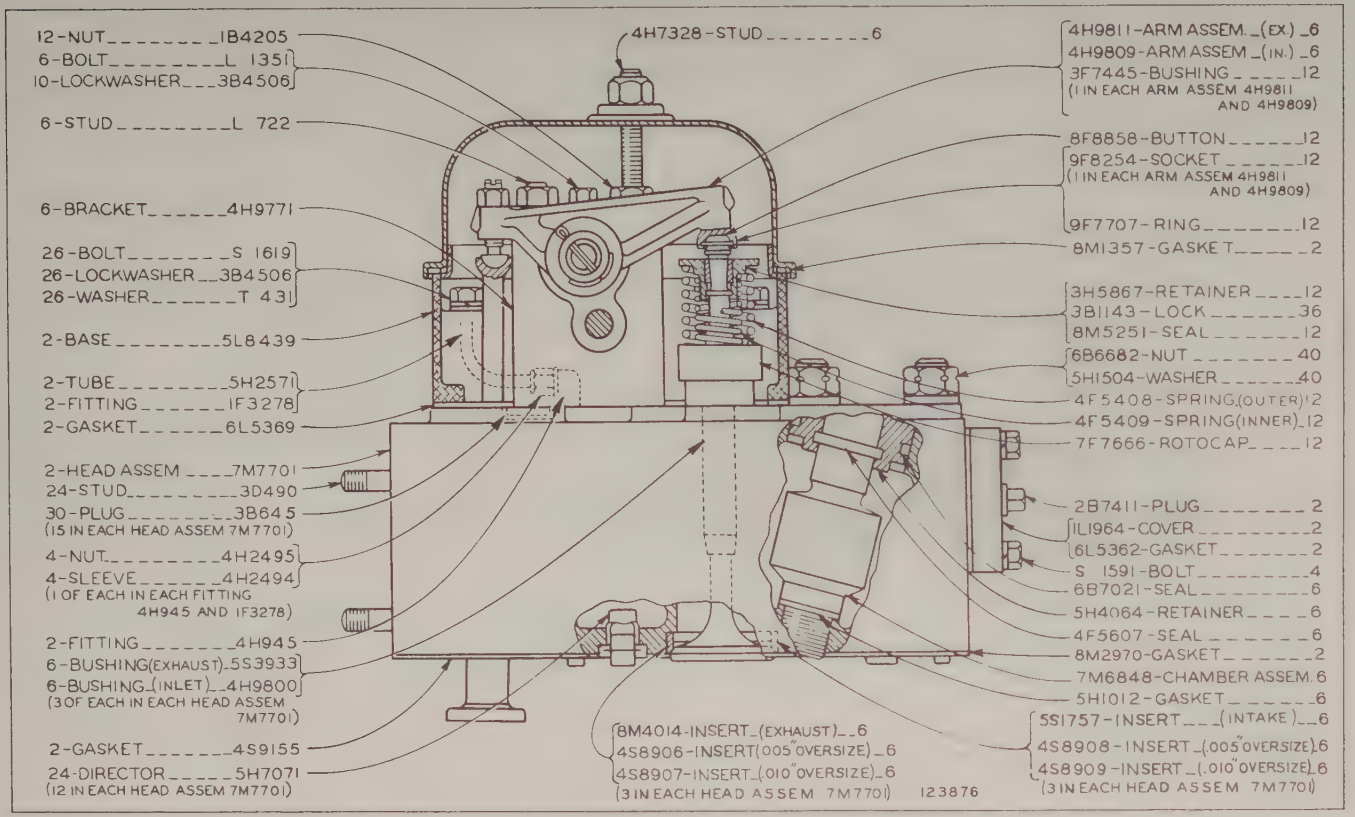


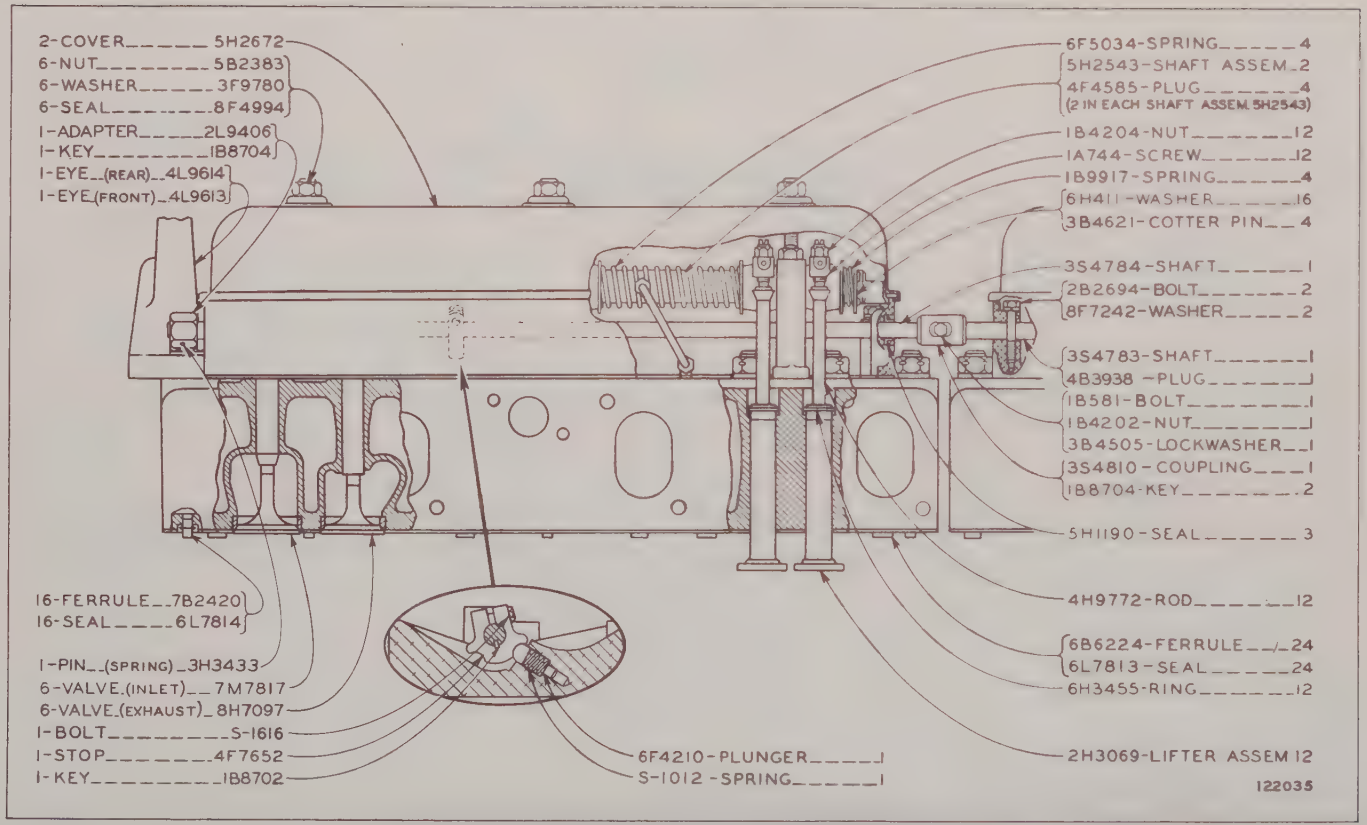


CYLINDER HEAD AND VALVE MECHANISM--SIDE VIEW
SERIAL No. 46B1902 TO 46B2379 INCLUSIVE AND 77B136 TO 77B276 INCLUSIVE
SEE PAGE 32 FOR GASKET KITS. REFER ALSO TO PAGE 73 FOR SPECIAL PARTS

CYLINDER HEAD AND VALVE MECHANISM--END VIEW

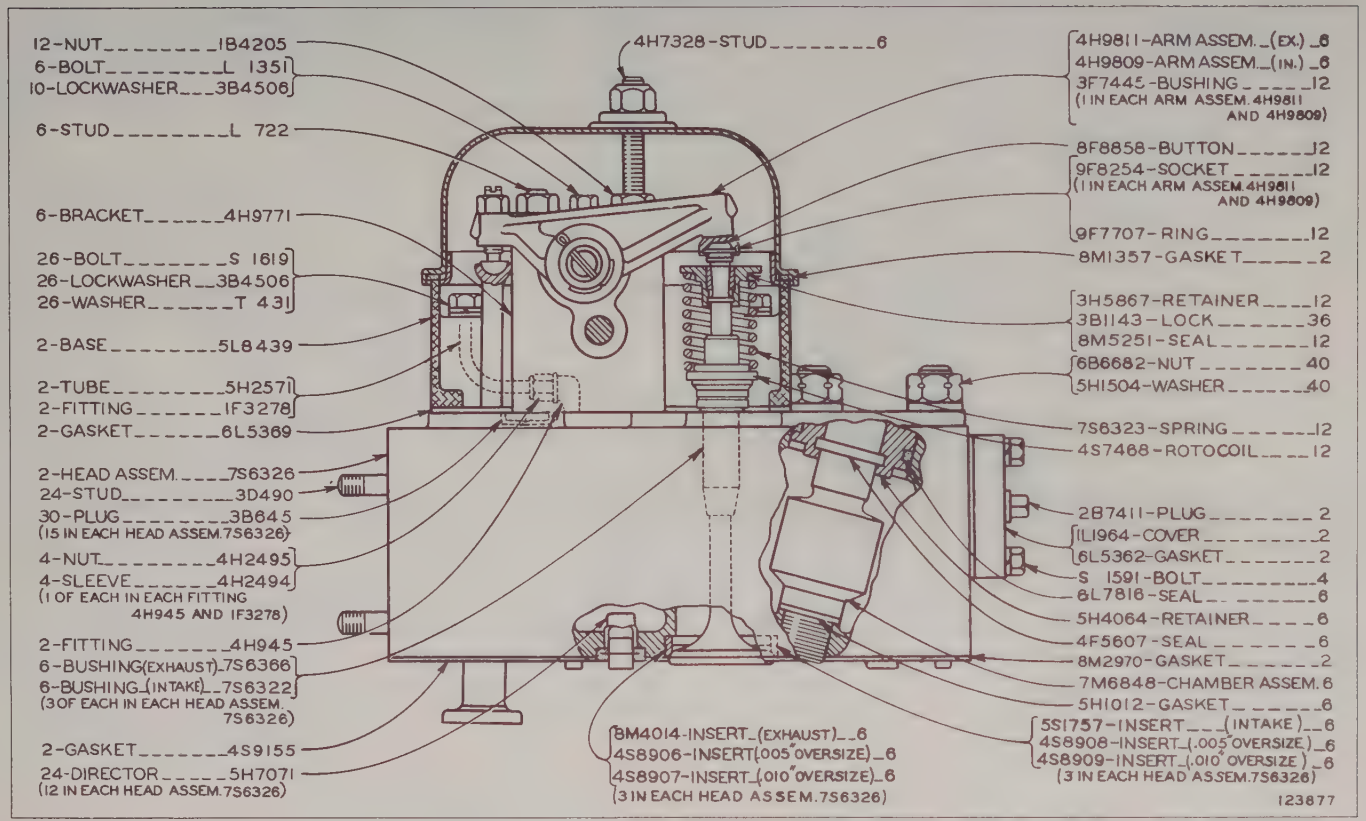
SERIAL NO. 46B1902 TO 46B2379 INCLUSIVE AND 77B136 TO 77B276 INCLUSIVE

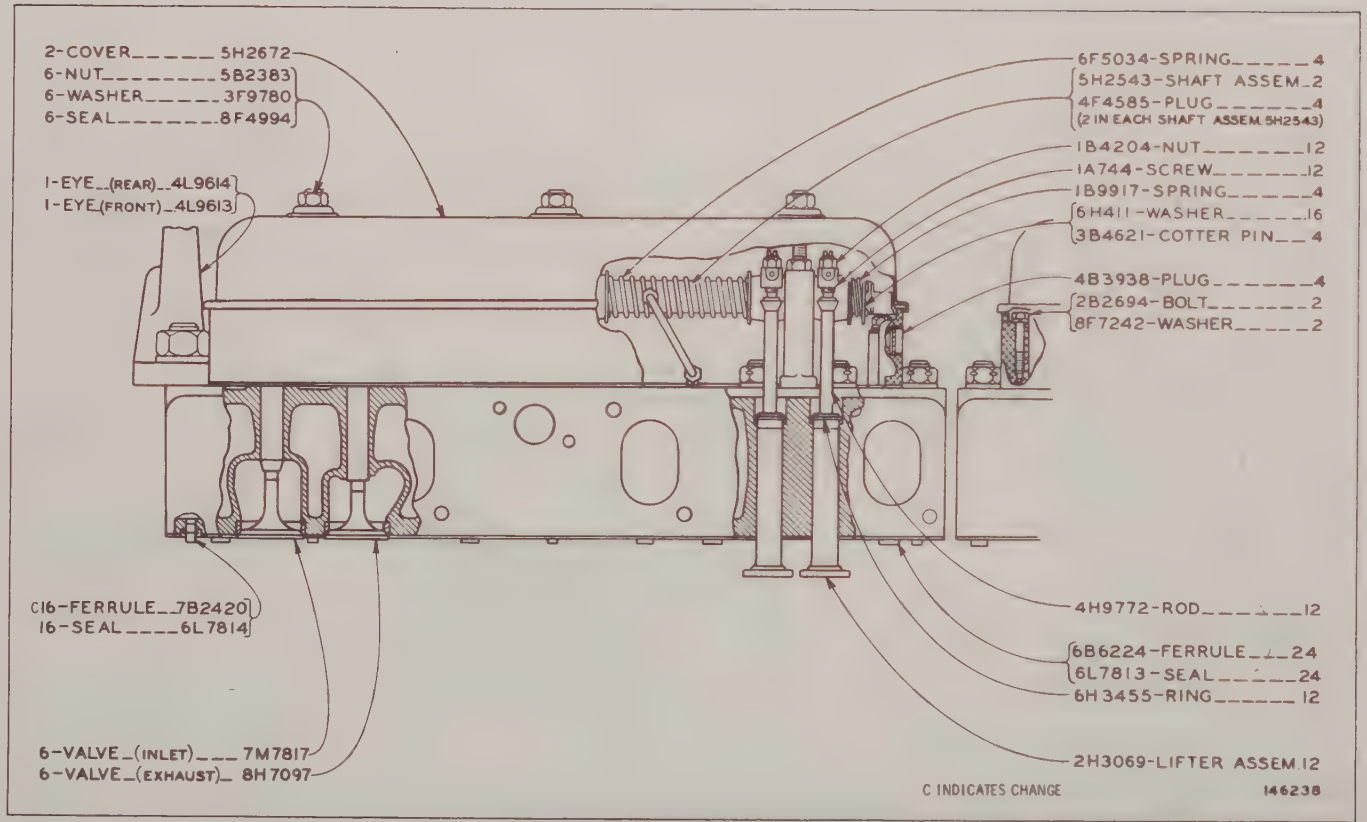




CYLINDER HEAD AND VALVE MECHANISM (7H3408 N/S)—Side View
Serial No. 46B2380 to 46B3181 inclusive and 77B277—Up
See Page 32 for Gasket Kits. Refer also to Page 73 for special parts

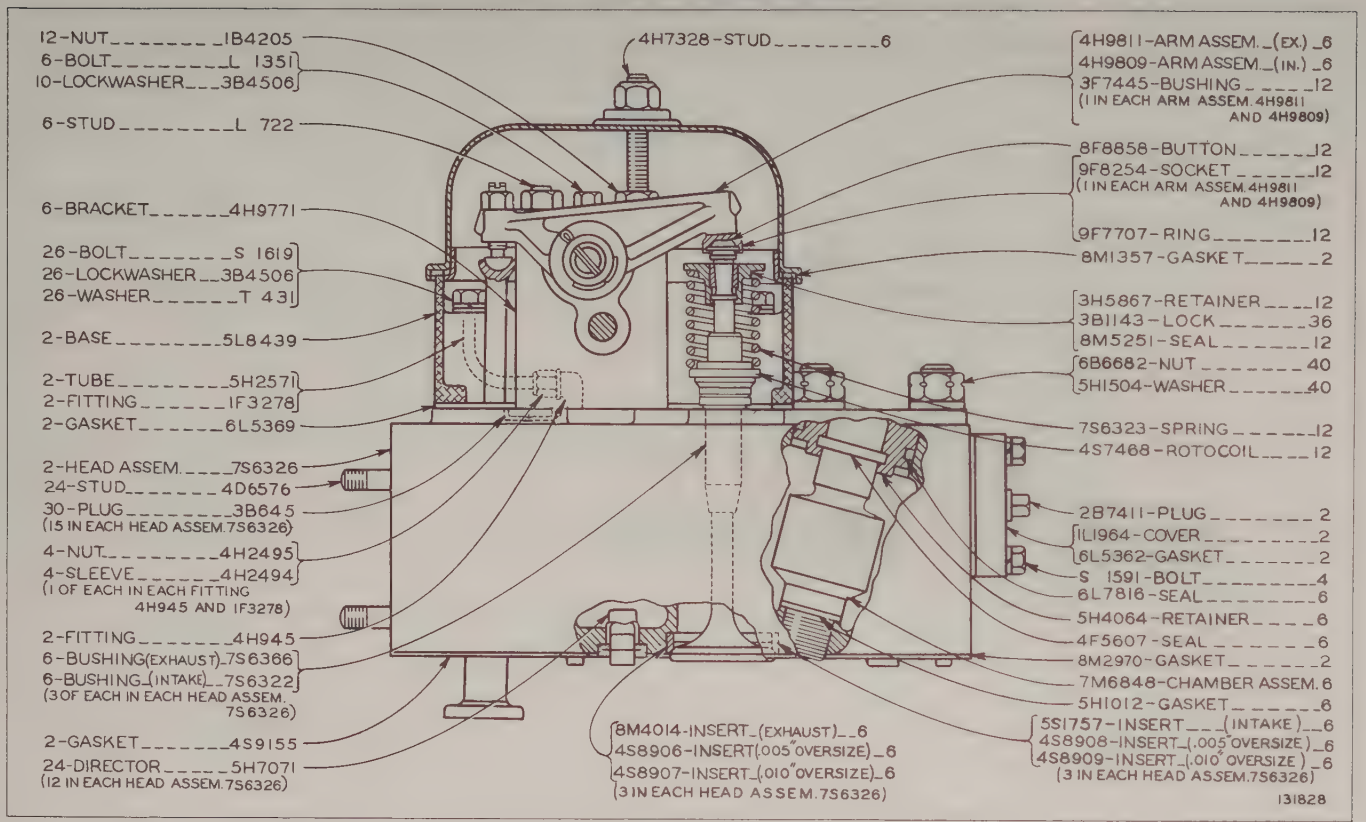
CYLINDER HEAD AND VALVE MECHANISM (7H3408 N/S)—End View
Serial No. 46B2380 to 46B3181 inclusive and 77B277—Up

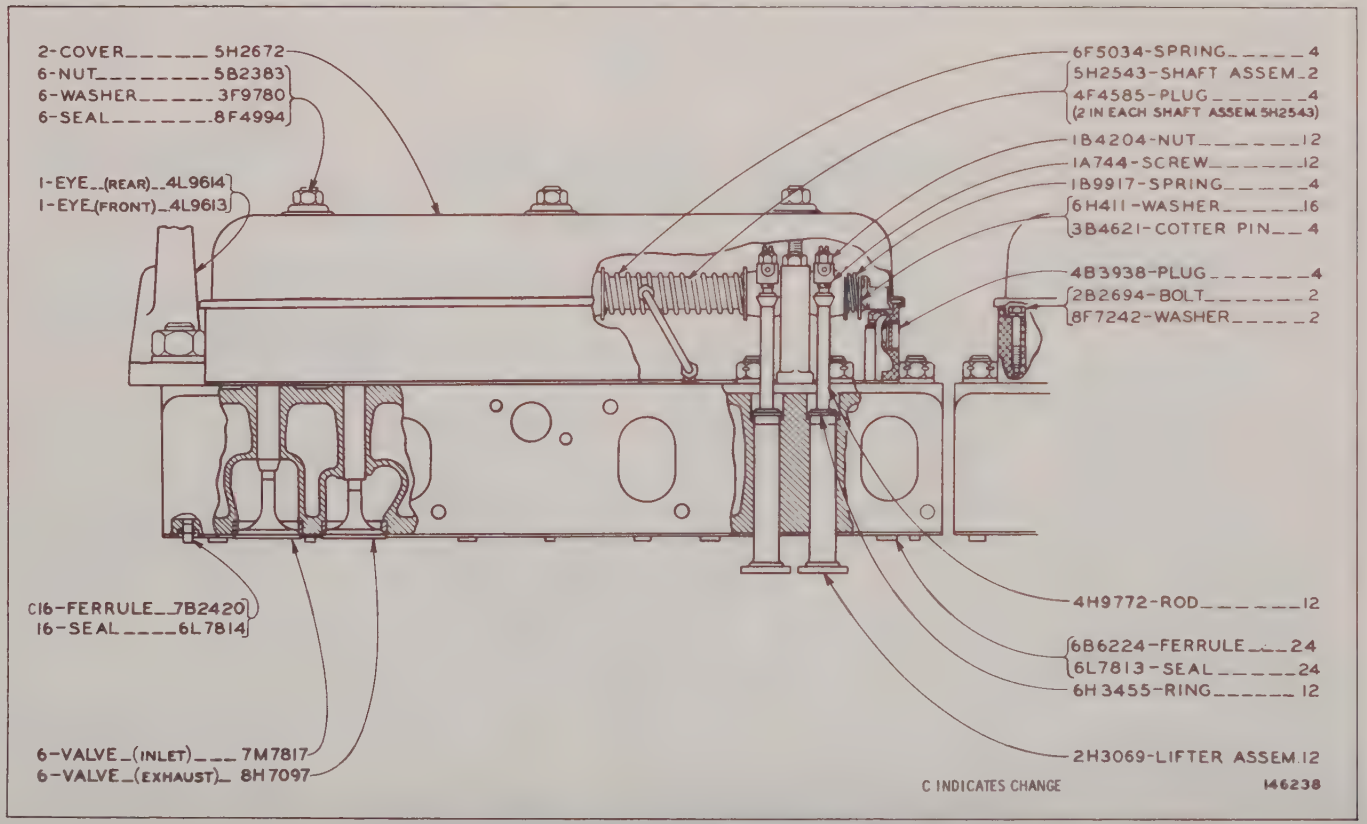




CYLINDER HEAD AND VALVE MECHANISM (7H3408 N/S)—Side View
Serial No. 46B3182 to 46B3189 inclusive
See Page 32 for Gasket Kits. Refer also to Page 73 for special parts

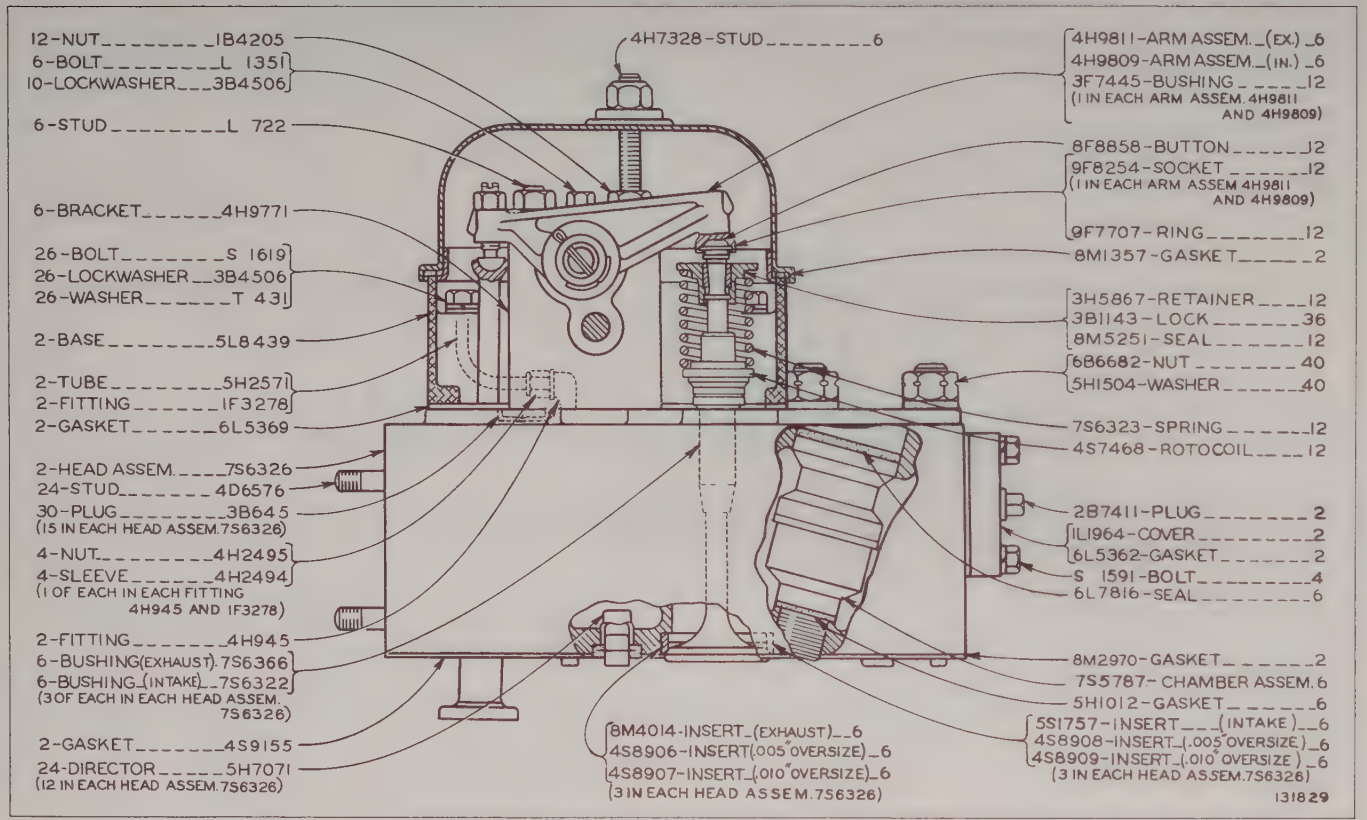
CYLINDER HEAD AND VALVE MECHANISM (7H3408 N/S)—End View
Serial No. 46B3182 to 46B3189 inclusive

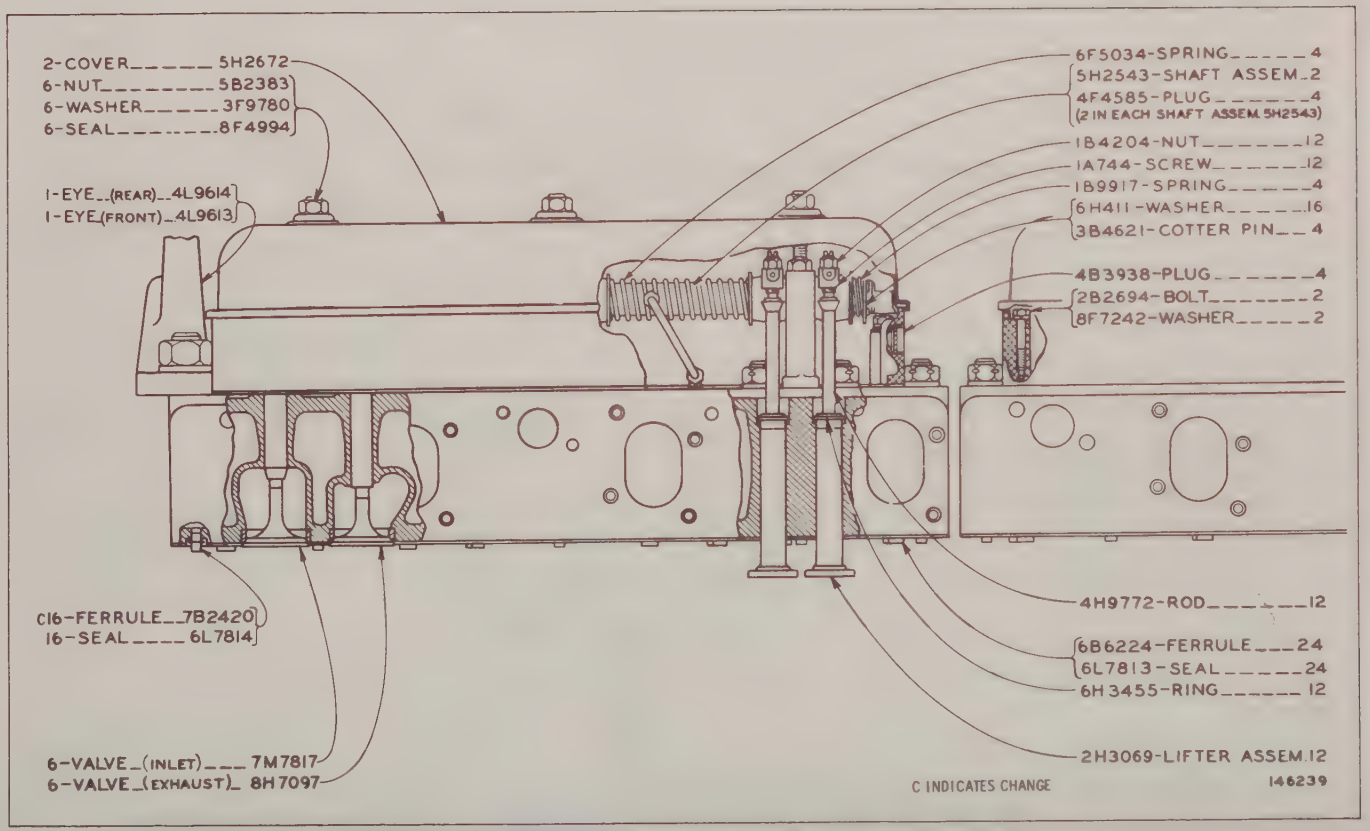




CYLINDER HEAD AND VALVE MECHANISM (7H3408 N/S)—Side View
Serial No. 46B3190 to 46B3516 inclusive
See Page 32 for Gasket Kits. Refer also to Page 73 for special parts

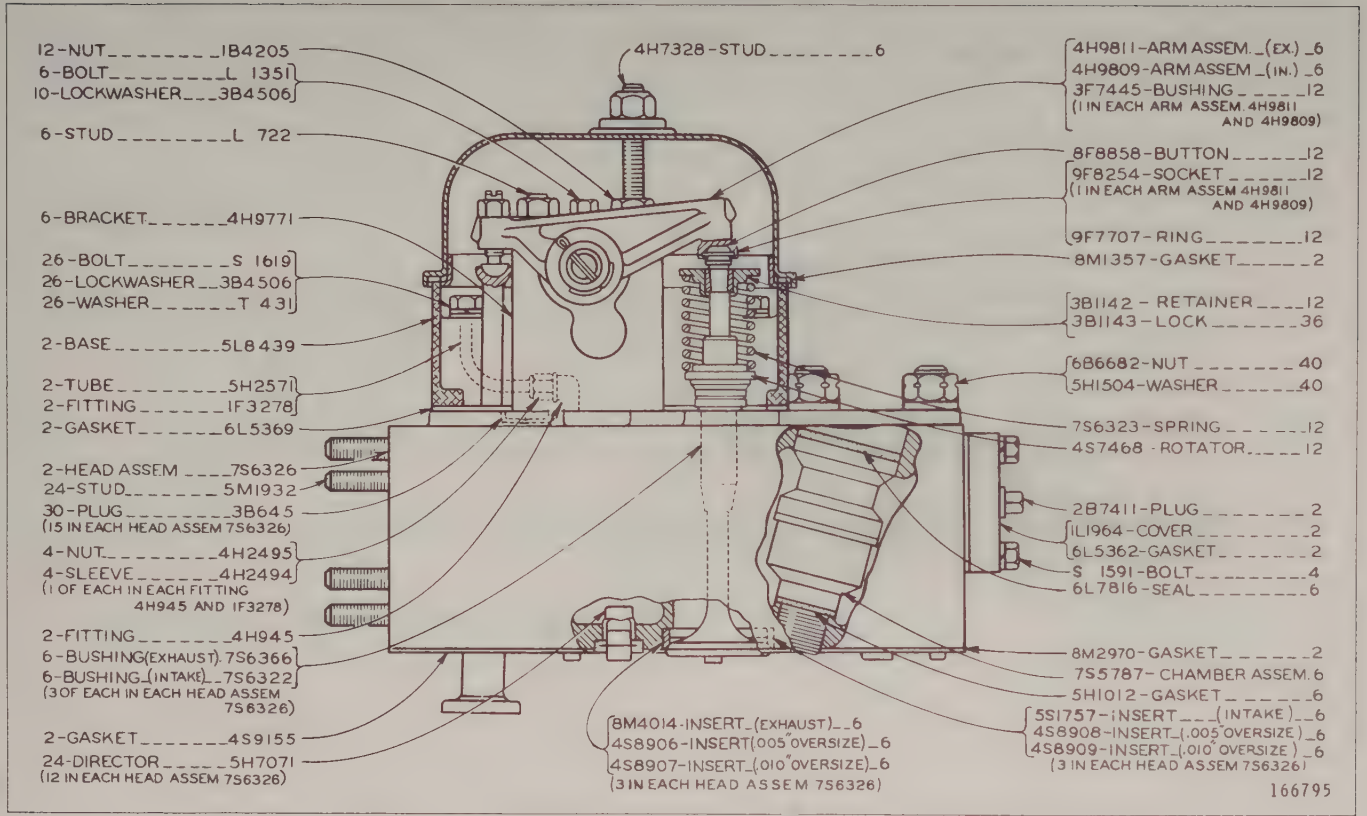
CYLINDER HEAD AND VALVE MECHANISM (7H3408 N/S)—End View
Serial No. 46B3190 to 46B3516 inclusive

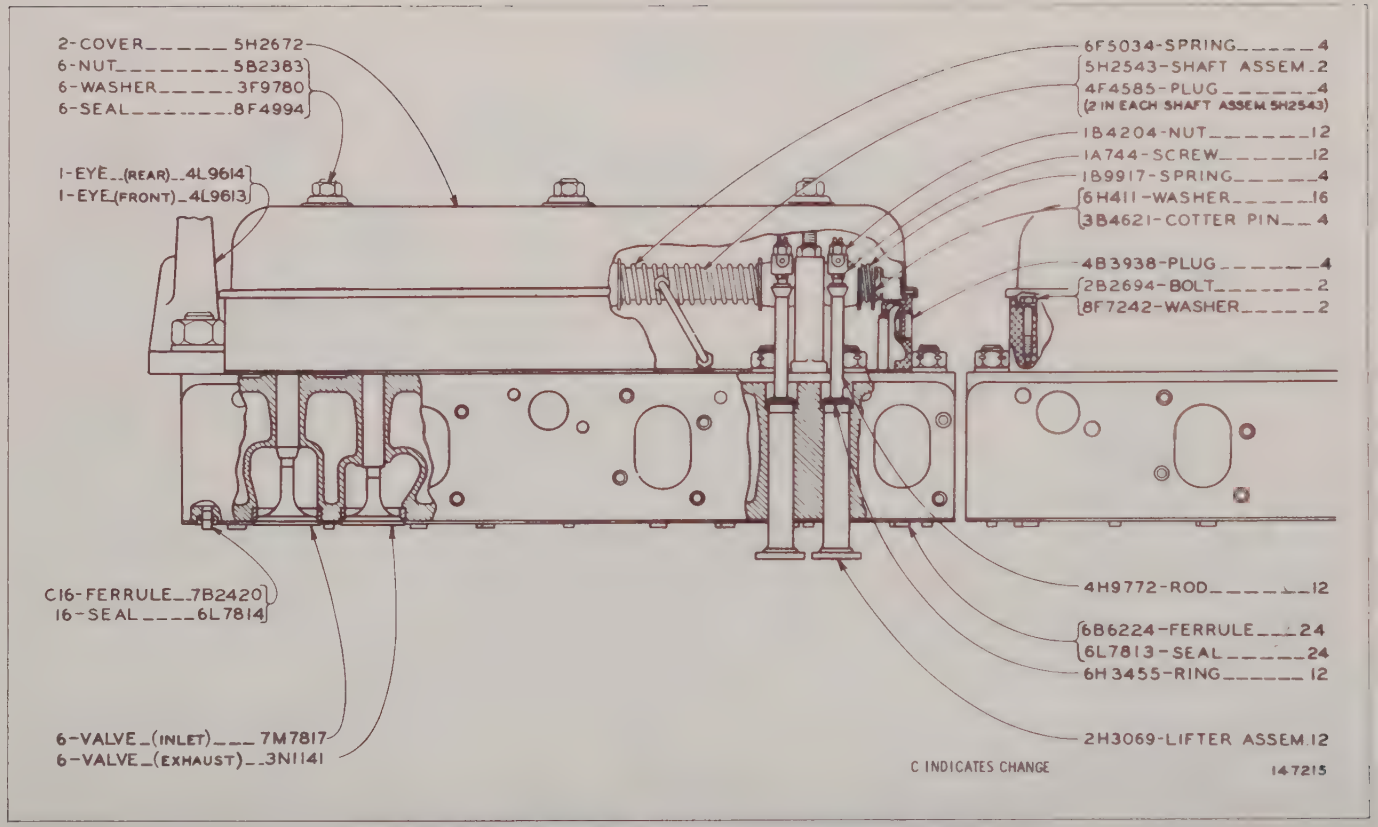




CYLINDER HEAD AND VALVE MECHANISM (7H3408 N/S)—Side View
Serial No. 46B3517 to 46B3823 inclusive
See Page 32 for Gasket Kits. Refer also to Page 73 for special parts

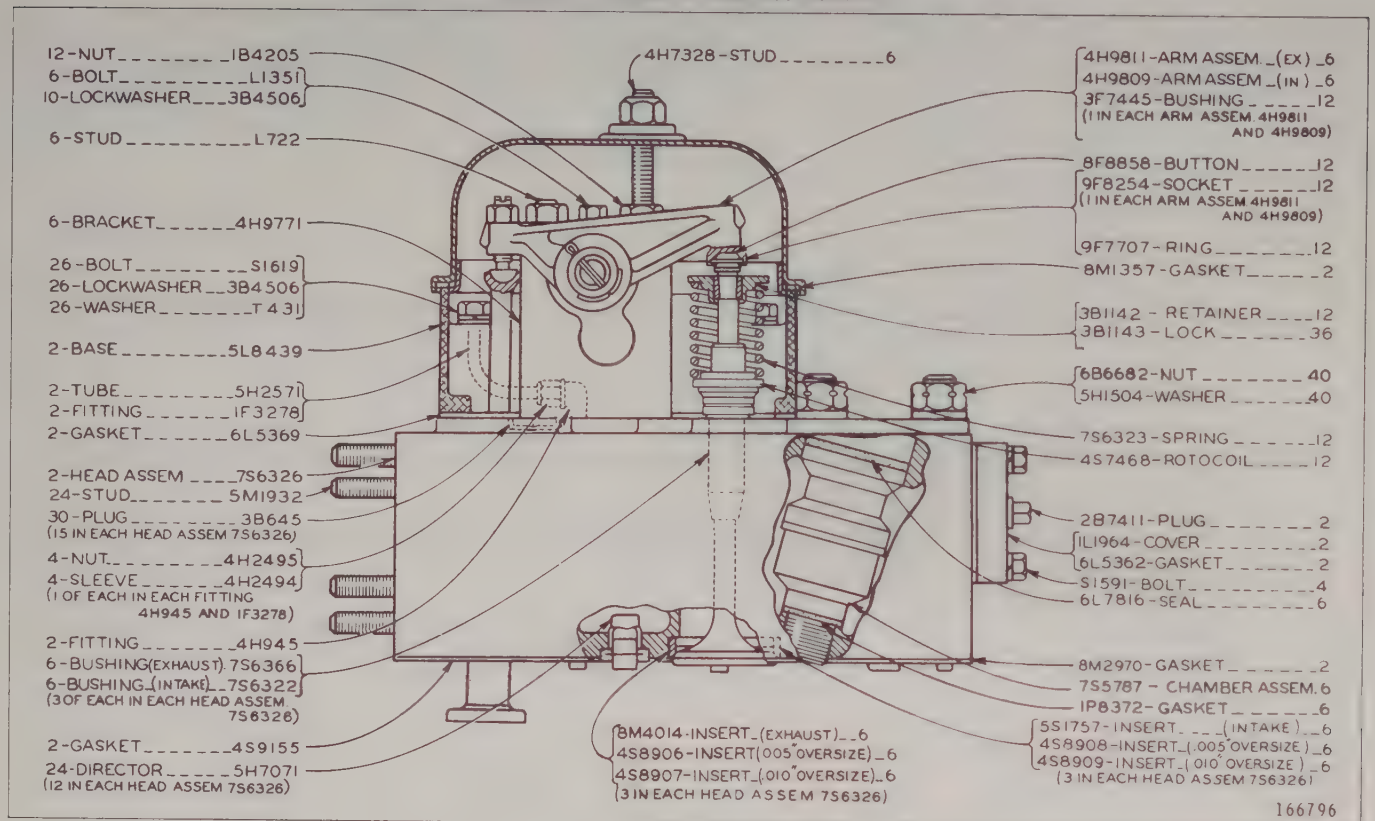
CYLINDER HEAD AND VALVE MECHANISM (7H3408 N/S)—End View
Serial No. 46B3517 to 46B3823 inclusive

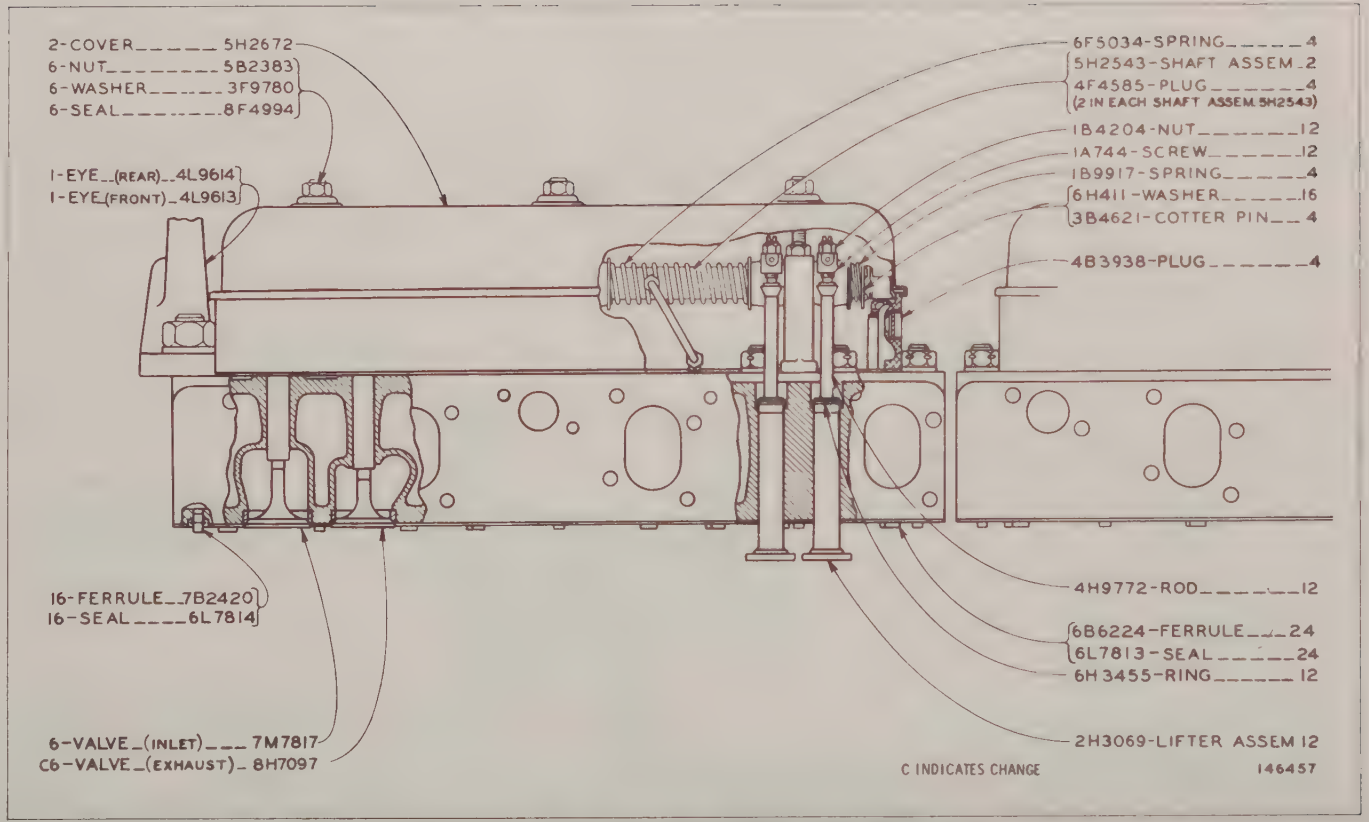




7H3408 CYLINDER HEAD AND VALVE MECHANISM GROUP—Side View
Serial No. 46B3824 to 46B4436 inclusive
See Page 32 for Gasket Kits. Refer also to Page 73 for special parts

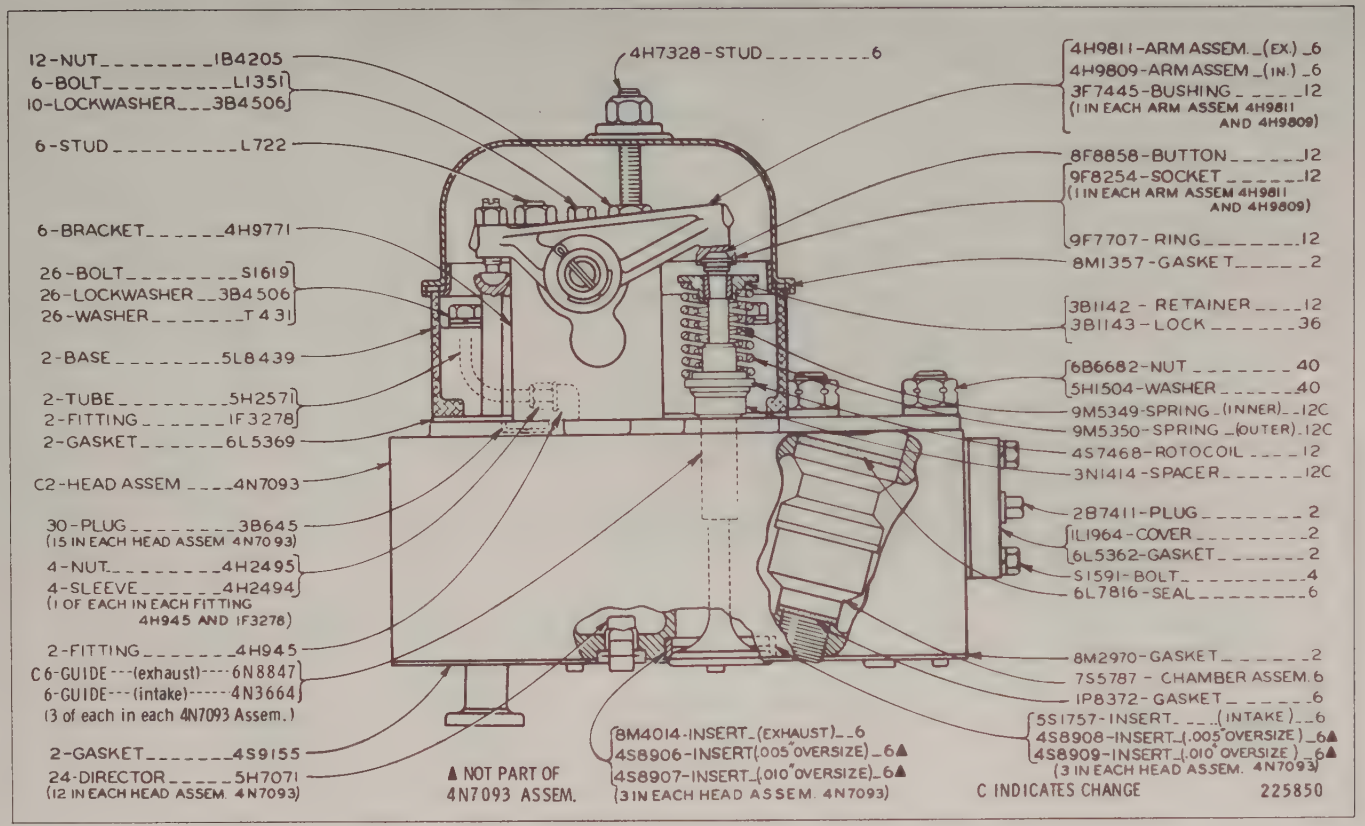
7H3408 CYLINDER HEAD AND VALVE MECHANISM GROUP—End View
Serial No. 46B3824 to 46B4436 inclusive

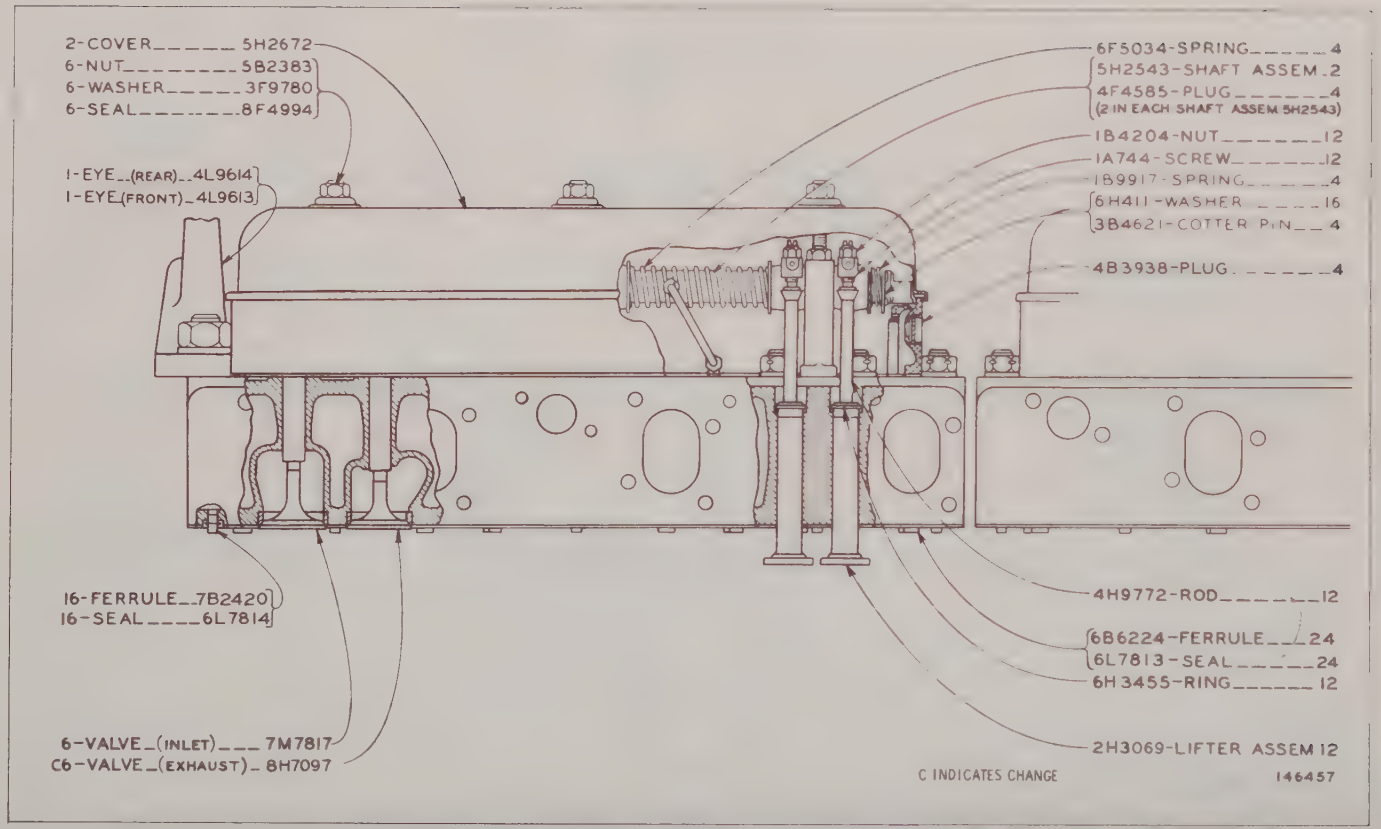




7H3408 CYLINDER HEAD AND VALVE MECHANISM GROUP—Side View
Serial No. 46B4437 to 46B4800 inclusive
See Page 32 for Gasket kits. Refer also to Page 73 for special parts

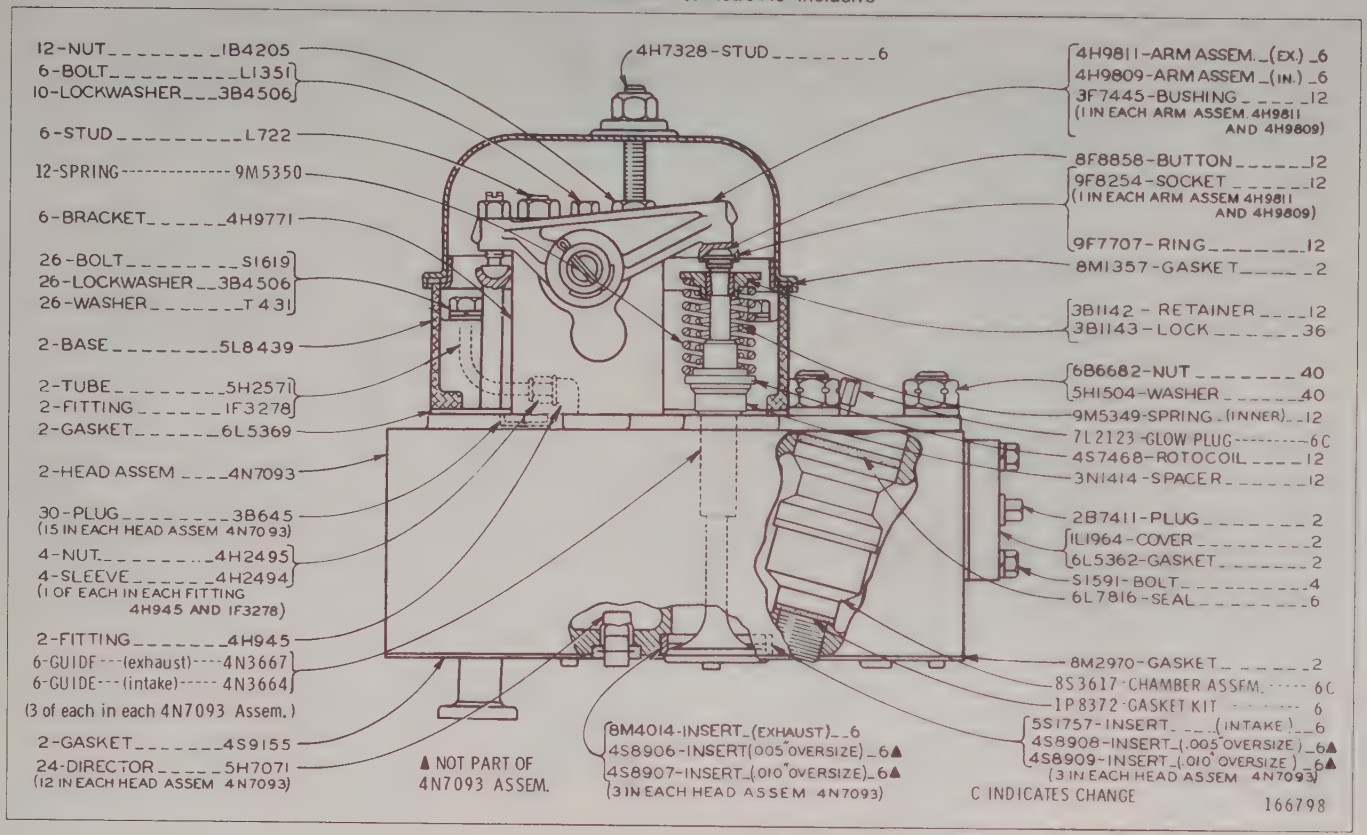
7H3408 CYLINDER HEAD AND VALVE MECHANISM GROUP—End View
Serial No. 46B4437 to 46B4800 inclusive

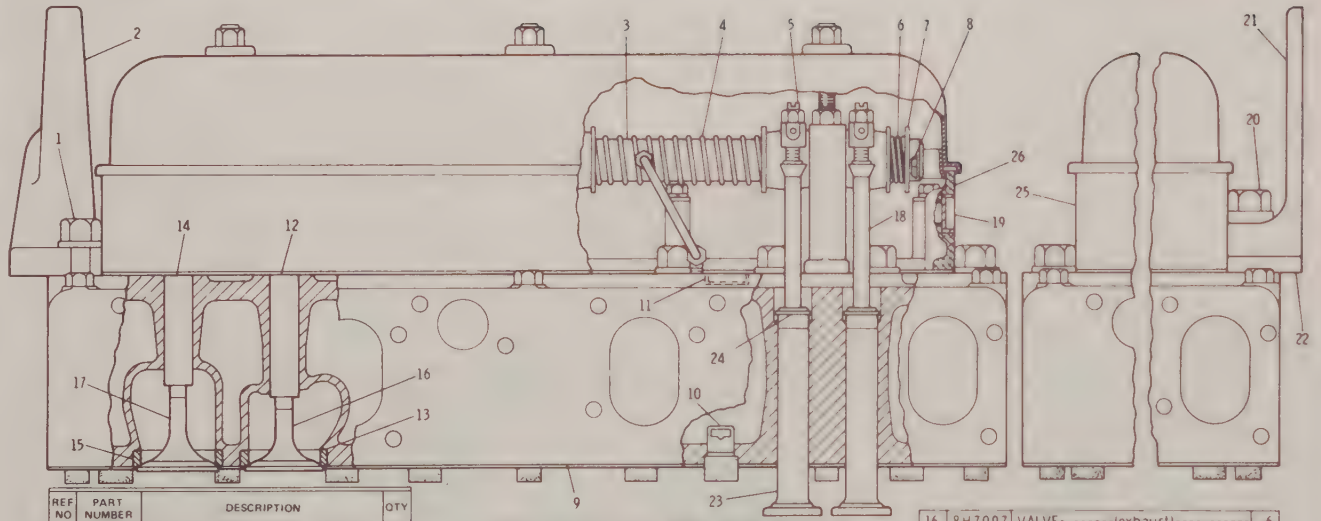




7H3408 CYLINDER HEAD AND VALVE MECHANISM GROUP—Side View—Part 1
Serial No. 46B4801 to 46B6446 inclusive
See Page 32 for Gasket Kits. Refer also to Page 73 for special parts

7H3408 CYLINDER HEAD AND VALVE MECHANISM—End View—Part 2
Serial No. 46B4801 to 46B6446 inclusive





REF NO	PART NUMBER	DESCRIPTION	QTY
1	8F4225	BOLT	2
	5H1504	WASHER	2
2	7N5582	EYE	1
3	5H2543	SHAFT ASSEM. (Each Includes)	2
	4F4585	PLUG	2
4	6F5034	SPRING	4
5	1A744	SCREW	12
	1B4204	NUT	12
6	1B9917	SPRING	4
7	6H411	WASHER	16
8	3B4621	COTTER PIN	4
9	7N3630	HEAD ASSEM. (Each Includes)	2
C 10	5H7071	DIRECTOR	12
11	3B645	PLUG	12
12	6N8847	GUIDE-(exhaust)	6
	8M4014	INSERT-(exhaust)	6
▲ 13	4S8906	INSERT-.127 mm(.005 in.) o.s.	6
▲	4S8907	INSERT-.254 mm(.010 in.) o.s.	6
14	4N3664	GUIDE-(intake)	6
	5S1757	INSERT-(intake)	6
▲ 15	4S8908	INSERT-.127 mm(.005 in.) o.s.	6
▲	4S8909	INSERT-.254 mm(.010 in.) o.s.	6
16	8H7097	VALVE-(exhaust)	6
17	7M7817	VALVE-(inlet)	6
18	4H9772	ROD	12
19	4B3938	PLUG	4
20	684117	BOLT	2
	6N3376	WASHER	2
21	7N5591	EYE-(front)	1
22	7N5590	PLATE	1
23	2H3069	LIFTER ASSEM.	12
24	6H3455	RING	12
25	5H1469	BASE	1
26	5L8439	BASE	1

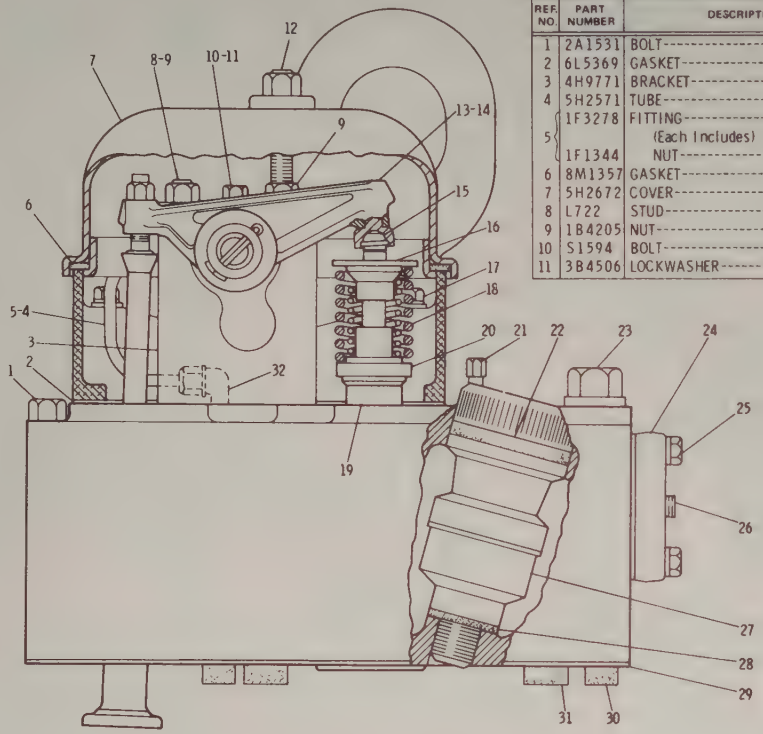
C INDICATES CHANGE

▲ NOT PART OF 7N3036 ASSEM.

165919

7N3036 CYLINDER HEAD GROUP—Side View
Serial No. 46B6447—Up
See Page 32 for Gasket Kits

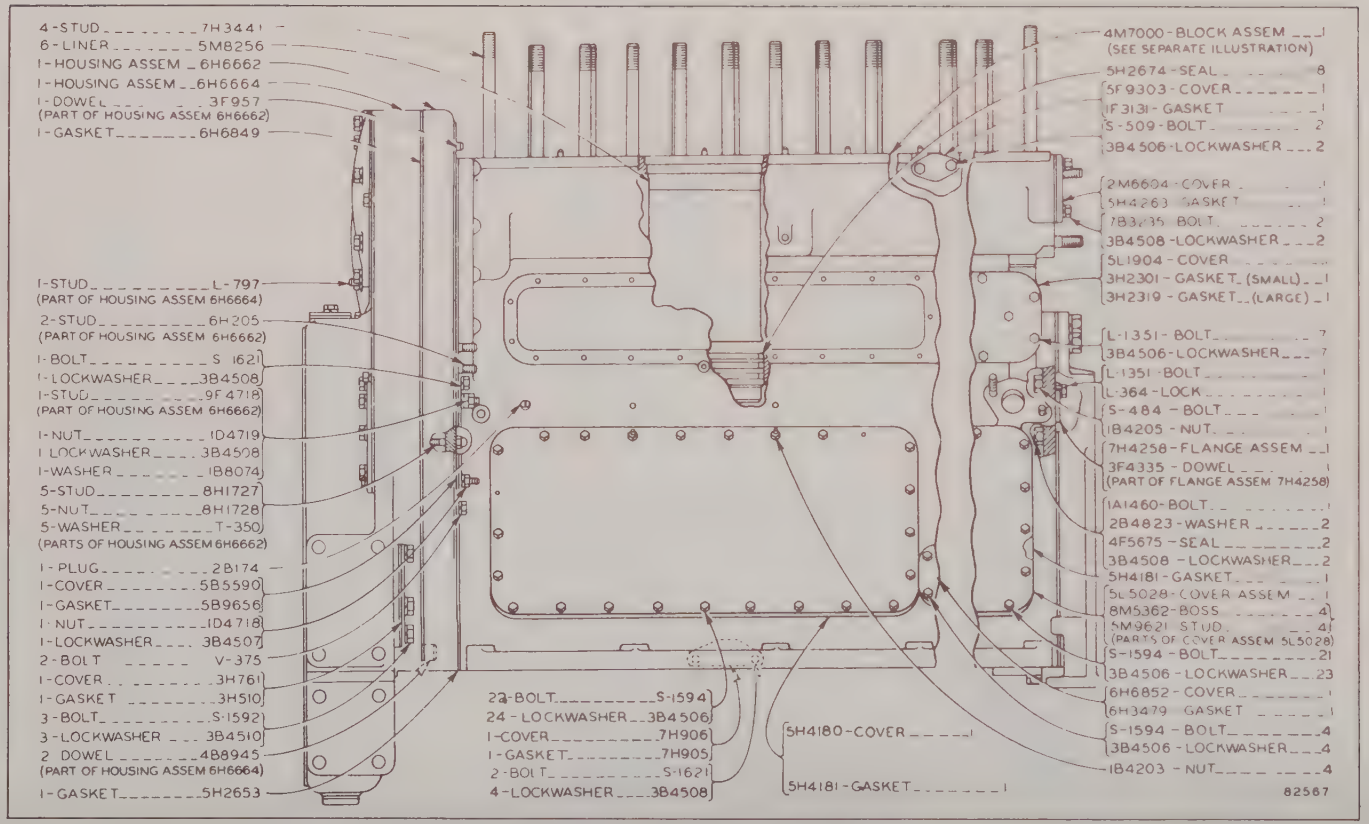
7N3036 CYLINDER HEAD GROUP—End View
Serial No. 46B6447—Up



REF. NO.	PART NUMBER	DESCRIPTION	QTY
1	2A1531	BOLT	10
2	6L5369	GASKET	2
3	4H9771	BRACKET	6
4	5H2571	TUBE	2
5	1F3278	FITTING	2
		(Each Includes)	
	1F1344	NUT	1
6	8M1357	GASKET	2
7	5H2672	COVER	2
8	L722	STUD	6
9	1B4205	NUT	12
10	S1594	BOLT	6
11	3B4506	LOCKWASHER	36

12	4H7328	STUD	6
	2M2570	NUT	6
	3F9780	WASHER	6
	8F4994	SEAL	6
13	4H9811	ARM ASSEM. (exhaust)	6
	4H9809	ARM ASSEM. (inlet)	6
		(Each Includes)	
14	3F7445	BUSHING	1
	9F8254	SOCKET	1
15	8F8858	BUTTON	12
16	9F7707	RING	12
	3B1142	RETAINER	12
17	3B1143	LOCK	36
	S1619	BOLT	26
	T431	WASHER	26
18	9M5350	SPRING (outer)	12
	9M5349	SPRING (inner)	12
19	3N1414	SPACER	12
20	4S7468	ROTATOR	1
21	7L2123	GLOW PLUG	6
22	6L7816	SEAL	6
23	1D4624	BOLT	36
	5H1504	WASHER	36
24	1L1964	FLANGE	2
	6L5362	GASKET	2
25	S1591	BOLT	4
26	2B7411	PLUG	2
27	8S3617	CHAMBER ASSEM.	6
28	1P8005	GASKET---4.6 mm(.181 in.) thick	6
	1P8004	GASKET---3.68 mm(.145 in.) thick	6
29	7N3083	GASKET	2
30	7N6244	SEAL	16
31	7N6243	SEAL	24
32	4H945	FITTING	2
		(Each Includes)	
	4H2495	NUT	1
	4H2494	SLEEVE	1

213890

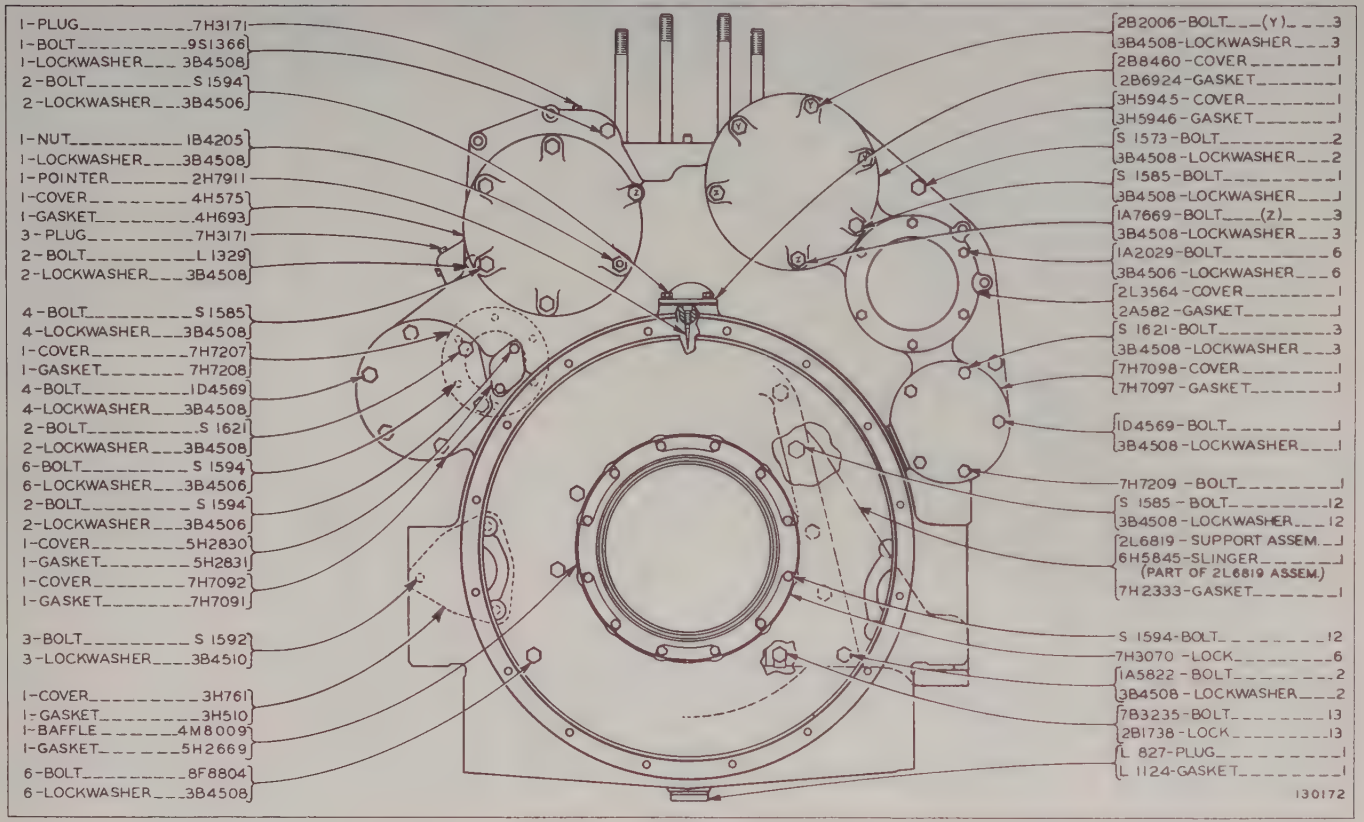


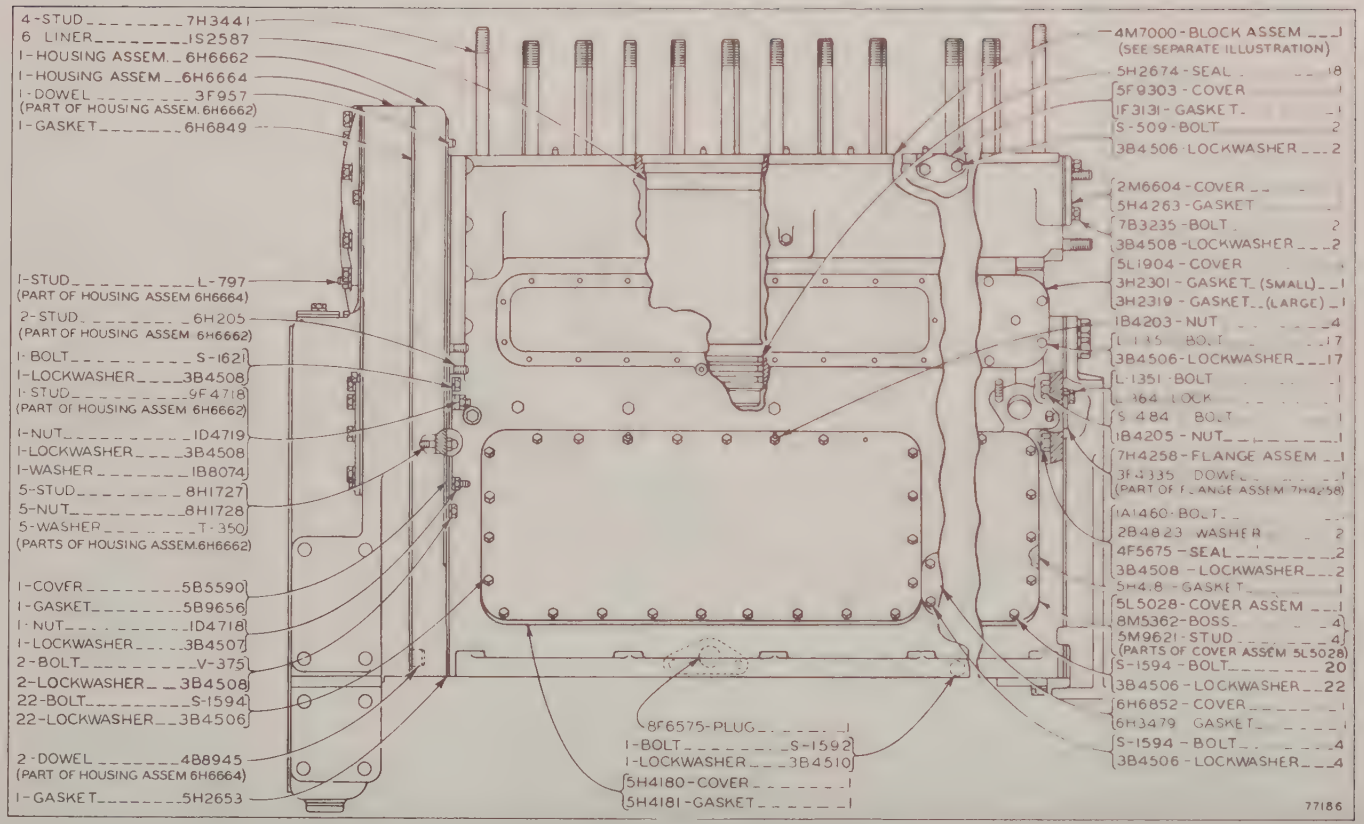
CYLINDER BLOCK AND COVERS—Side View
Serial No. 77B1 to 77B121 inclusive
4M7000 Cylinder Block Assembly parts are shown on Page 28. See Page 32 for Gasket Kits

CYLINDER BLOCK AND COVERS—End View

Serial No. 77B1 to 77B121 inclusive

Refer also to Pages 94 and 95 for special parts





CYLINDER BLOCK AND COVERS--SIDE VIEW

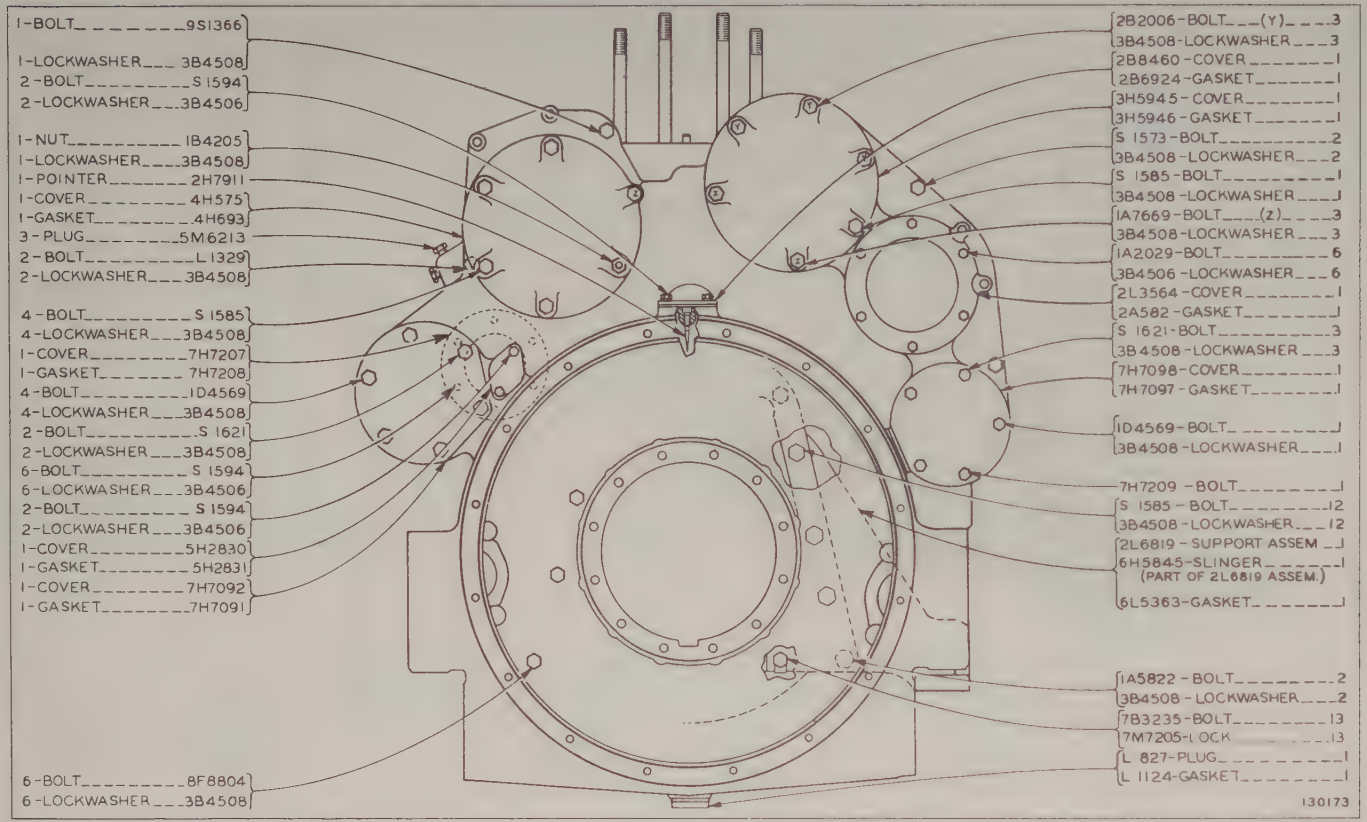
SERIAL NO. 46B1558 TO 46B2275 INCLUSIVE AND 77B122 TO 77B235 INCLUSIVE

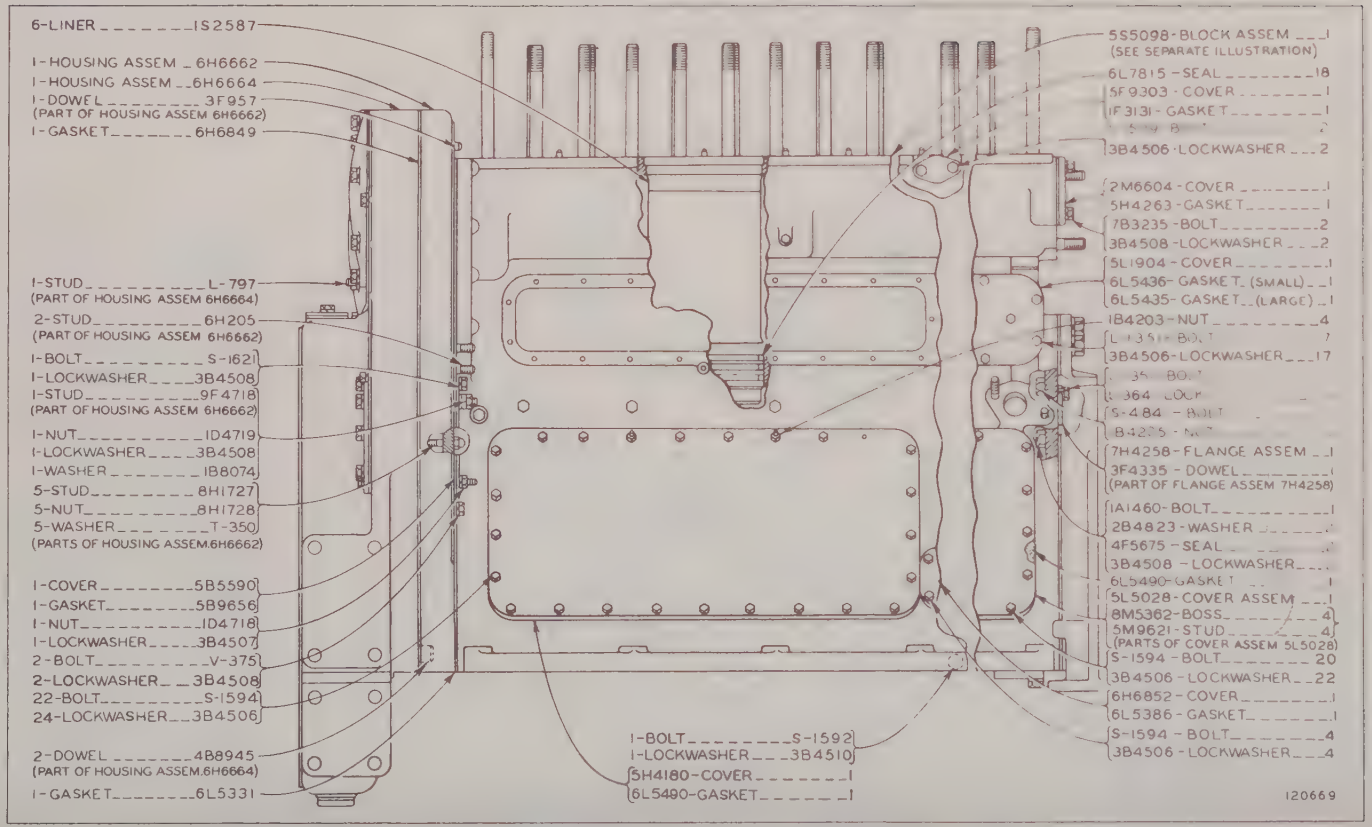
4M7000 CYLINDER BLOCK PARTS ARE SHOWN ON PAGE 28. SEE PAGE 32 FOR GASKET KITS

CYLINDER BLOCK AND COVERS--End View

Serial No. 46B1558 to 46B2275 inclusive and 77B122 to 77B235 inclusive

Refer also to Pages 94 & 95 for special parts



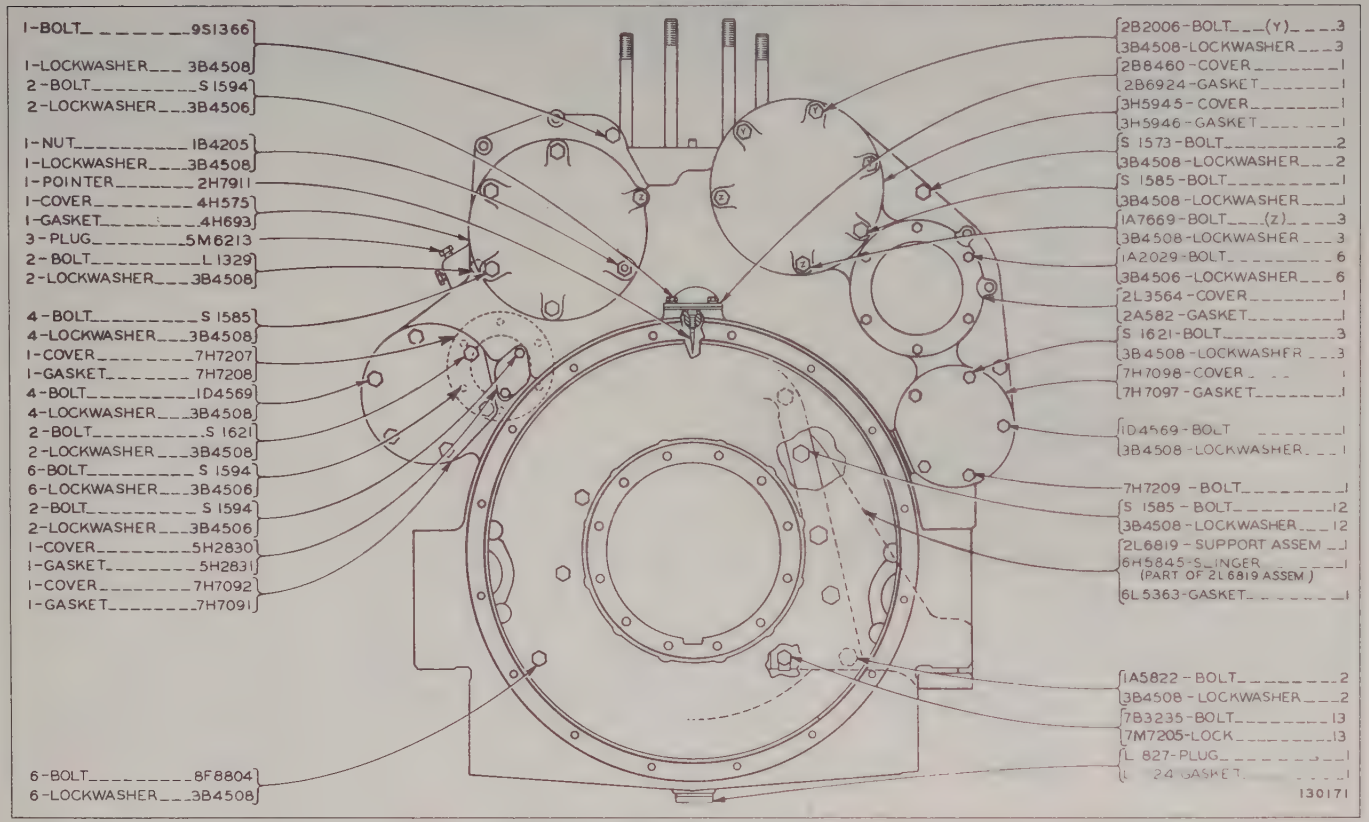


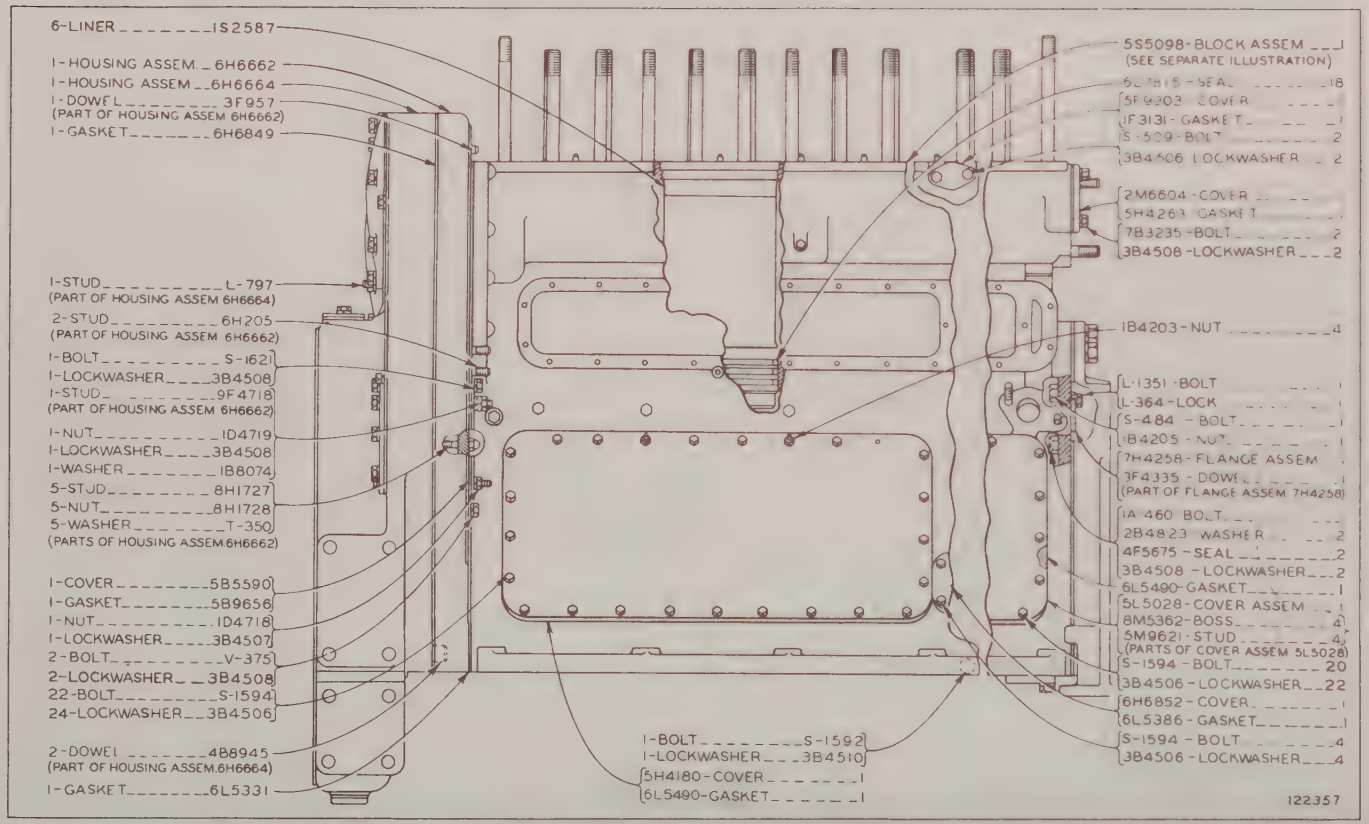
CYLINDER BLOCK AND COVERS–Side View
Serial No. 46B2276 to 46B2410 inclusive and 77B236 to 77B292 inclusive
5S5098 Cylinder Block parts are shown on Page 28A. See Page 32 for Gasket Kits

CYLINDER BLOCK AND COVERS—End View

Serial No. 46B2276 to 46B2410 inclusive and 77B236 to 77B292 inclusive

Refer also to Pages 94 and 95 for special parts



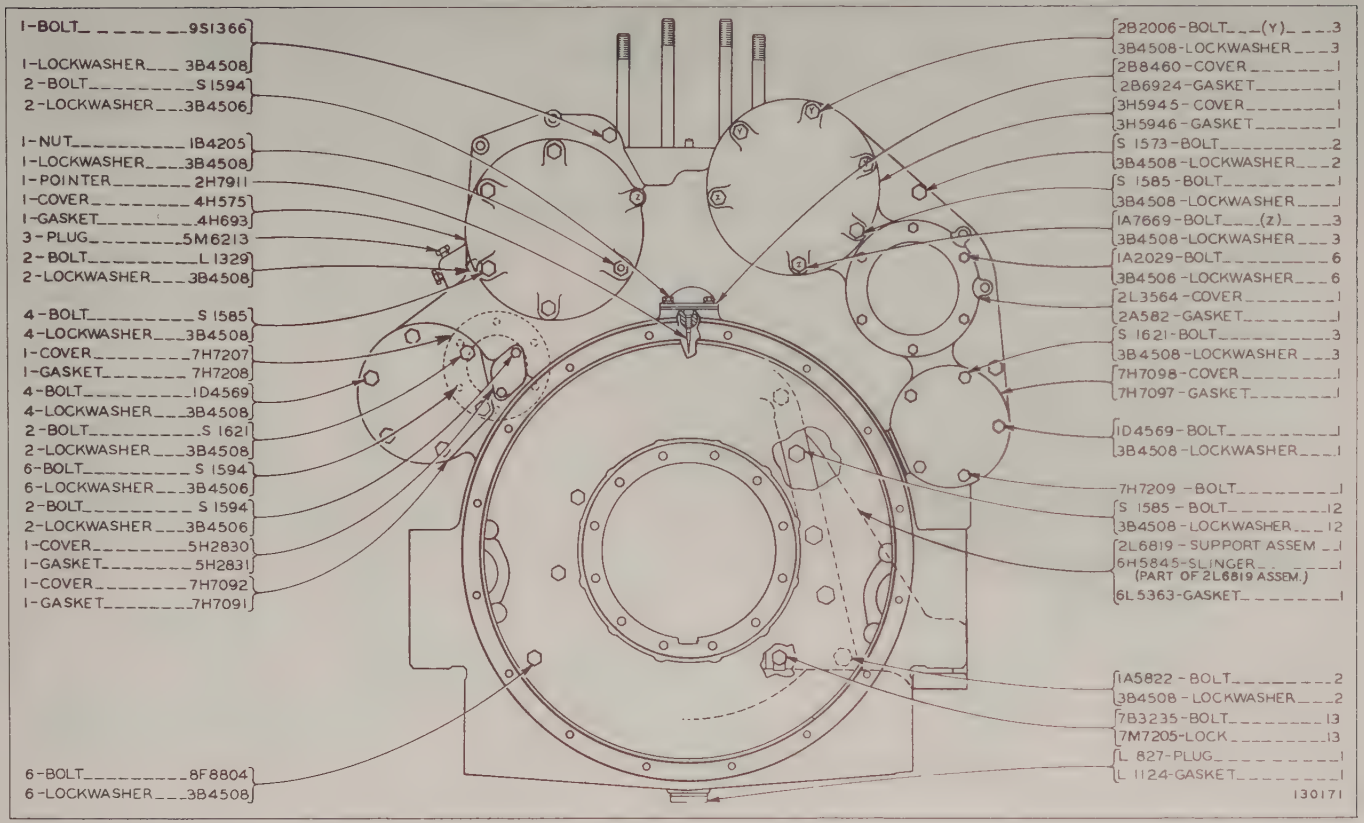


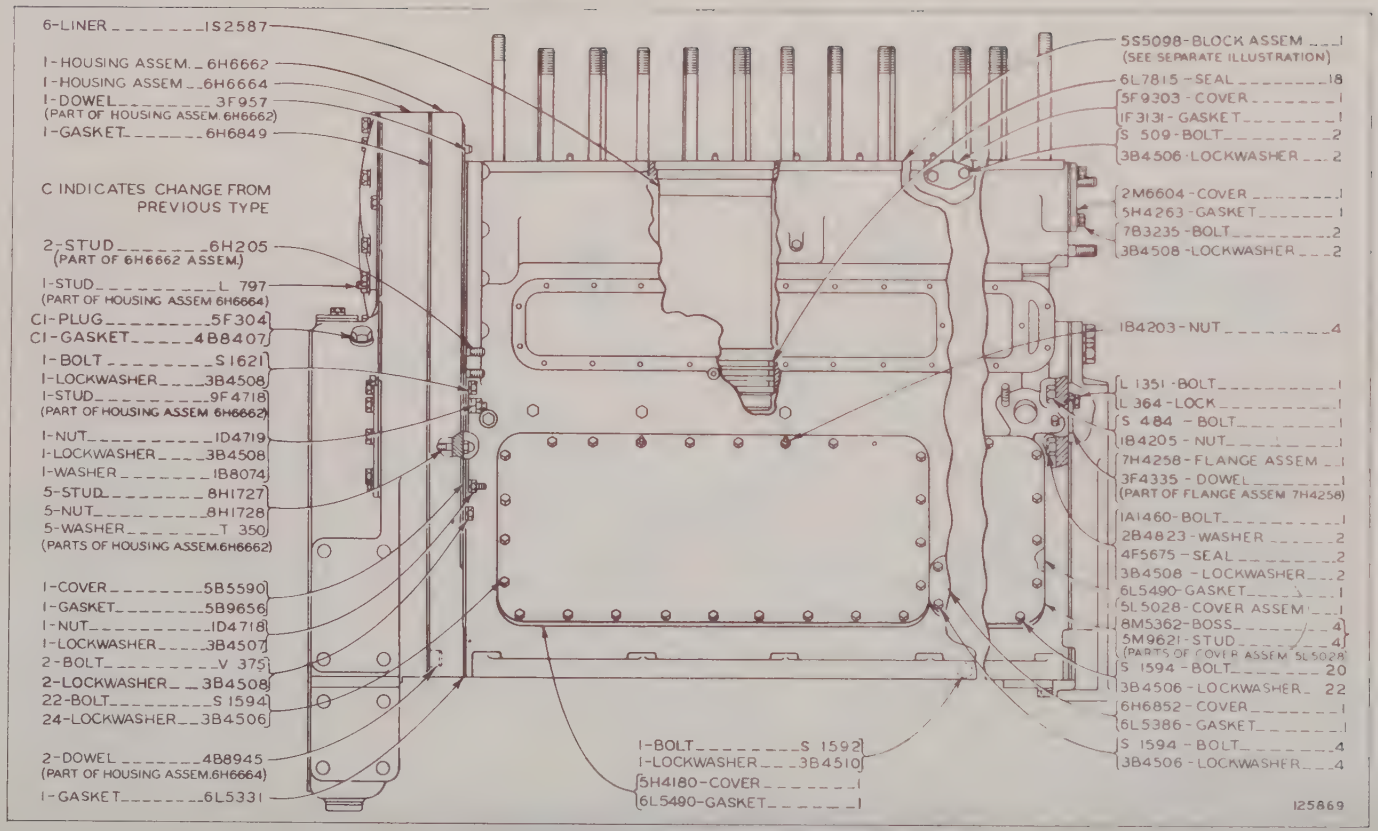
CYLINDER BLOCK AND COVERS—Side View
Serial No. 46B2411 to 46B2899 inclusive and 77B293-Up
5S5098 Cylinder Block parts are shown on Page 28A. See Page 32 for Gasket Kits

CYLINDER BLOCK AND COVERS—End View

Serial No. 46B2411 to 46B2899 inclusive and 77B293—Up

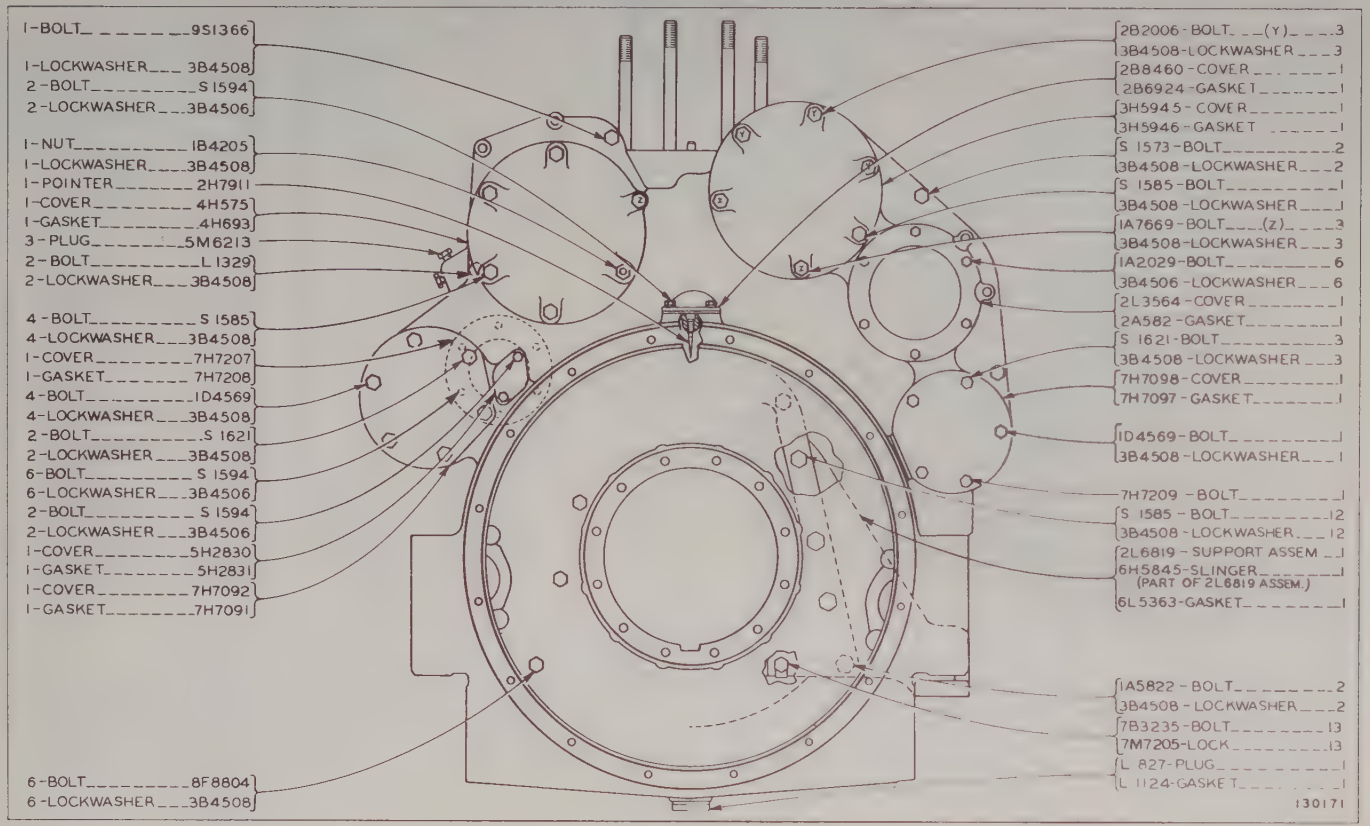
Refer also to Pages 94 and 95 for special parts

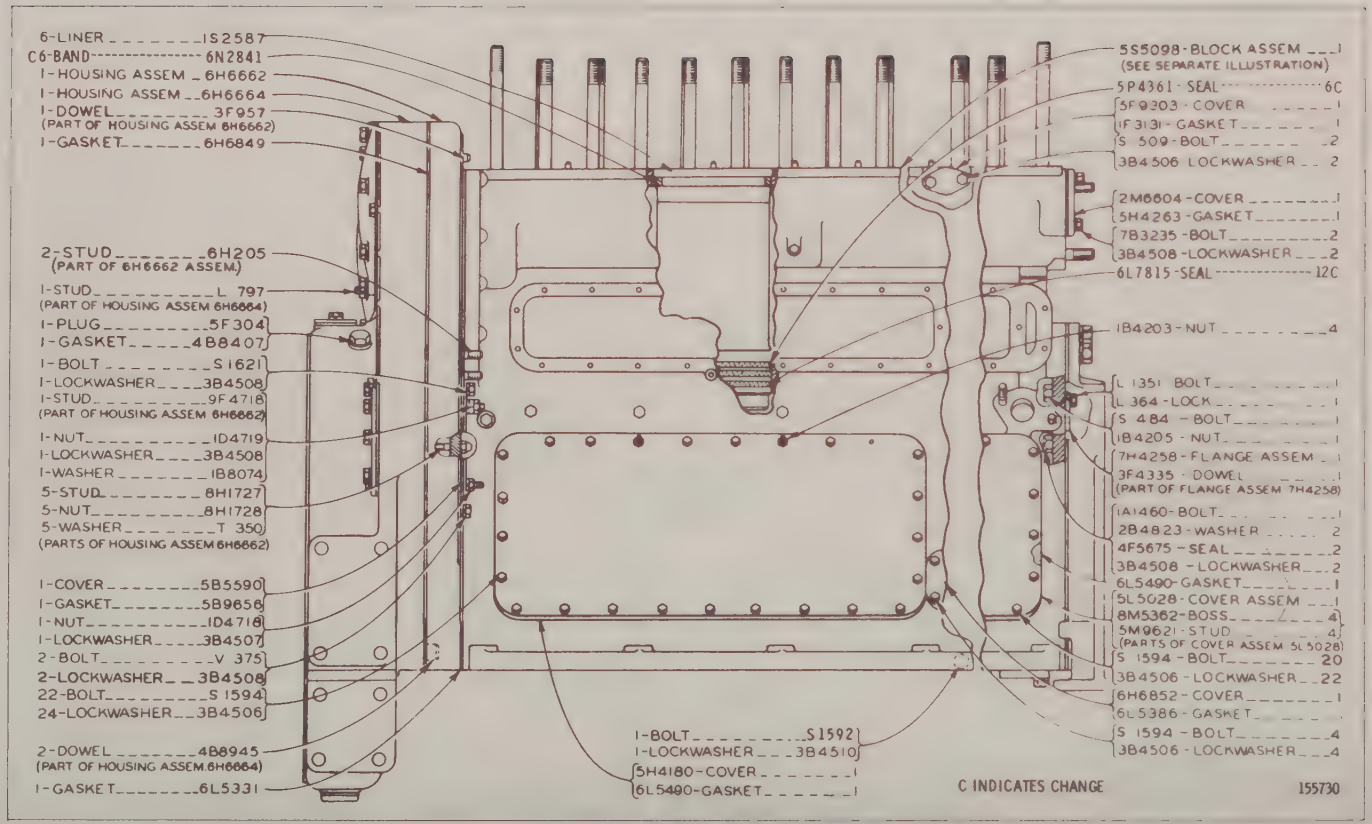




7L5469 CYLINDER BLOCK AND COVERS GROUP—Side View
Serial No. 46B2900 to 46B5249 inclusive
5S5098 Cylinder Block parts are shown on Pages 28A and 28B. See Page 32 for Gasket Kits

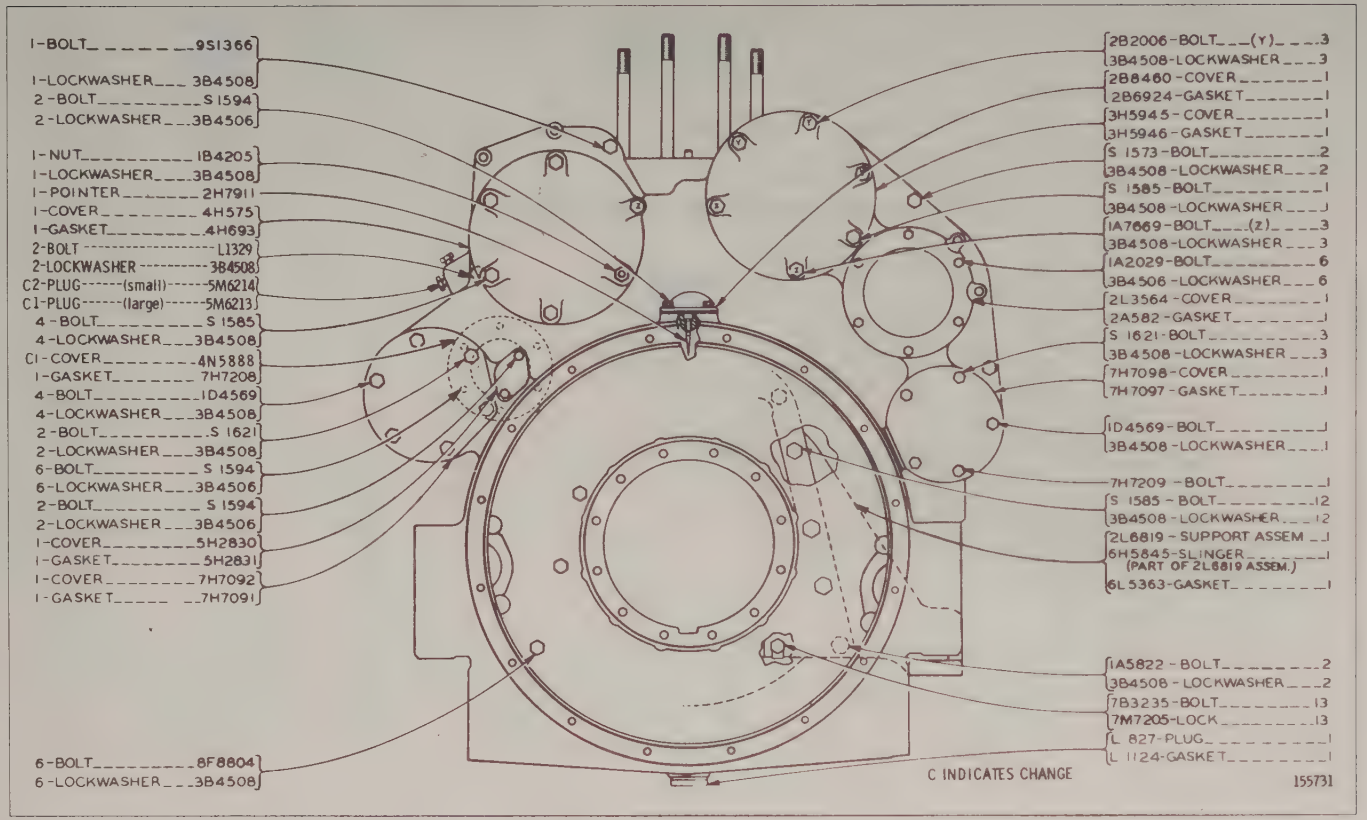
7L5469 CYLINDER BLOCK AND COVERS GROUP—End View
Serial No. 46B2900 to 46B5249 inclusive
Refer also to Pages 94 and 95 for special parts

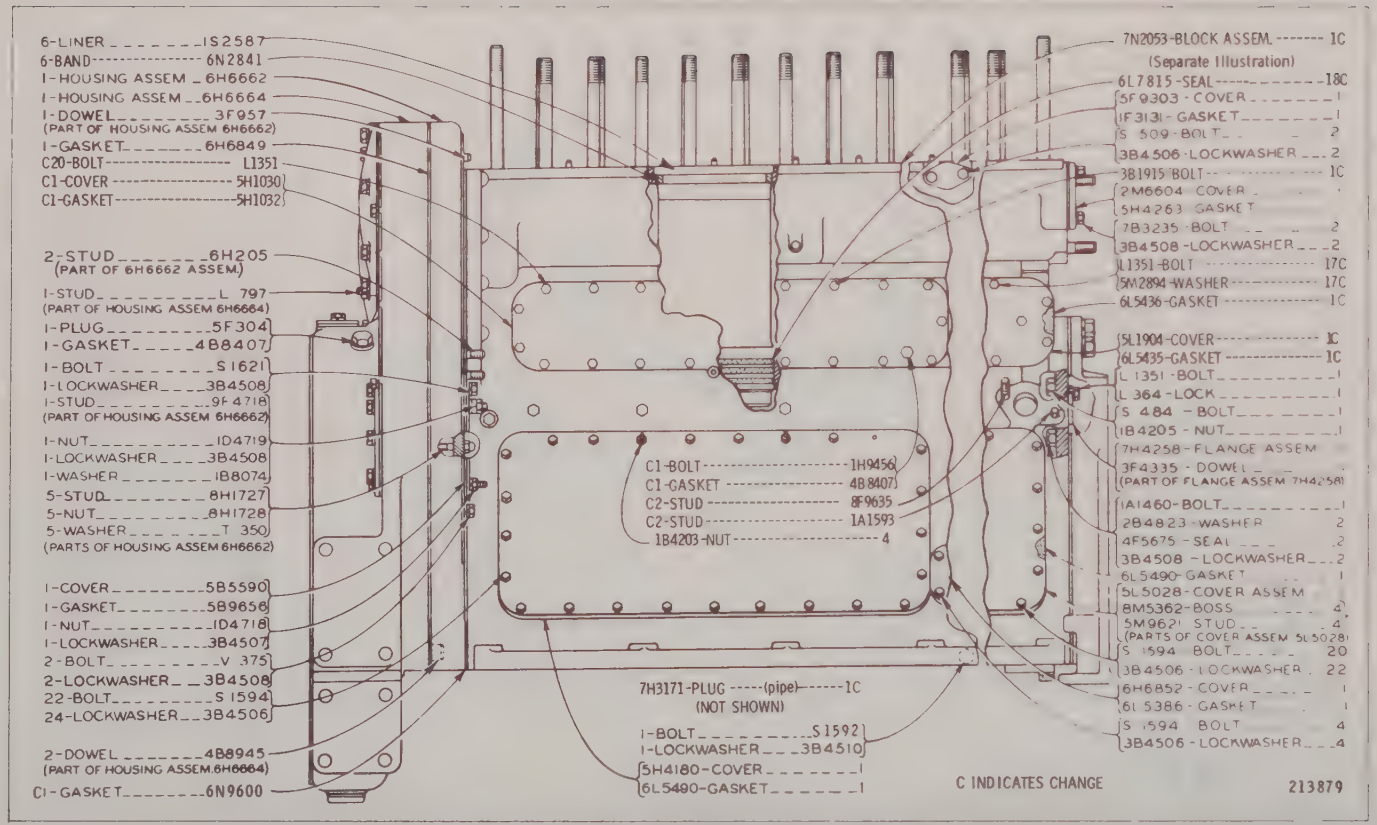




7L5469 BLOCK AND COVERS GROUP—Side View
Serial No. 46B5250 to 46B6421 inclusive
5S5098 Cylinder Block parts are shown on Pages 28A and 28B See Page 32 for Gasket Kits

7L5469 CYLINDER BLOCK AND COVERS GROUP—End View
Serial No. 46B5250 to 46B6421 inclusive
Refer also to Pages 94 and 95 for special parts



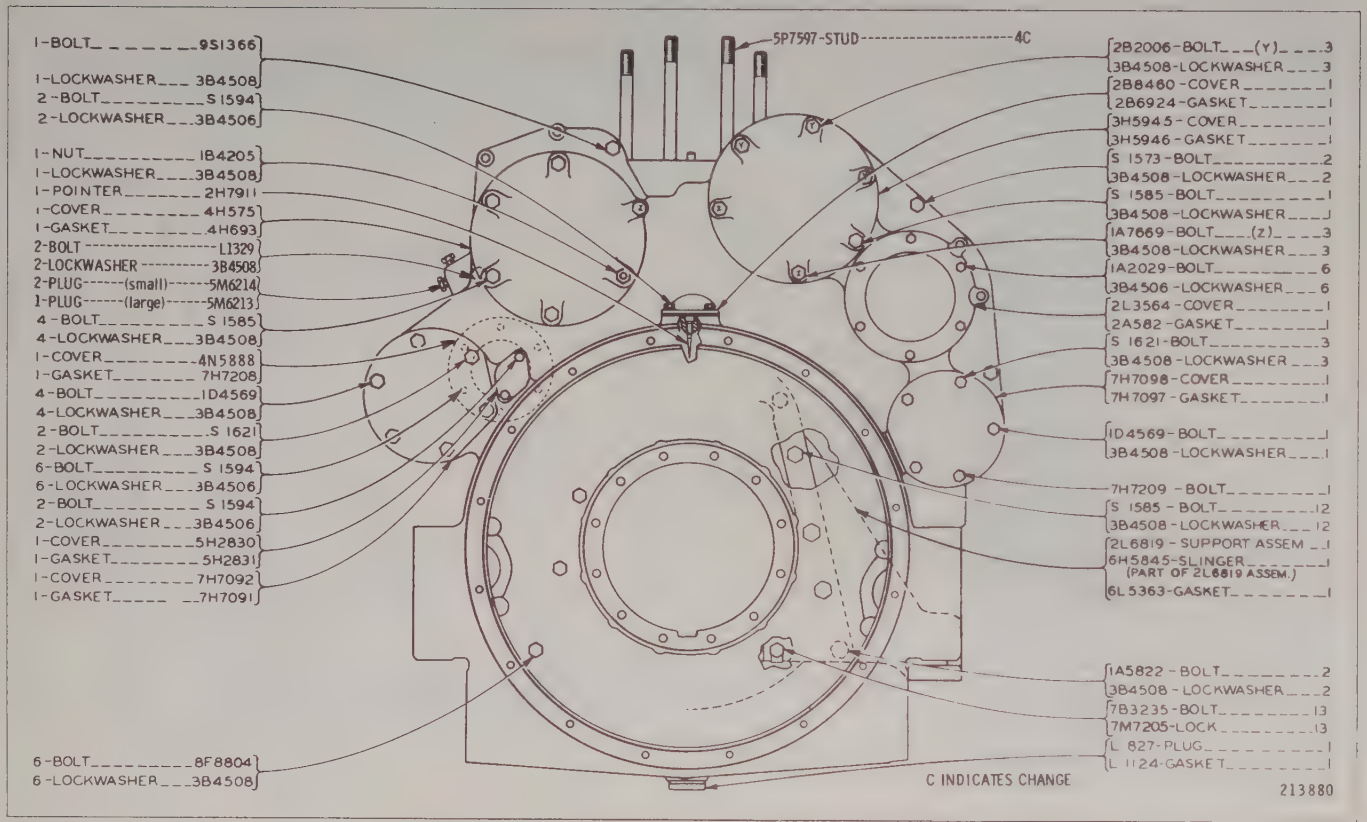


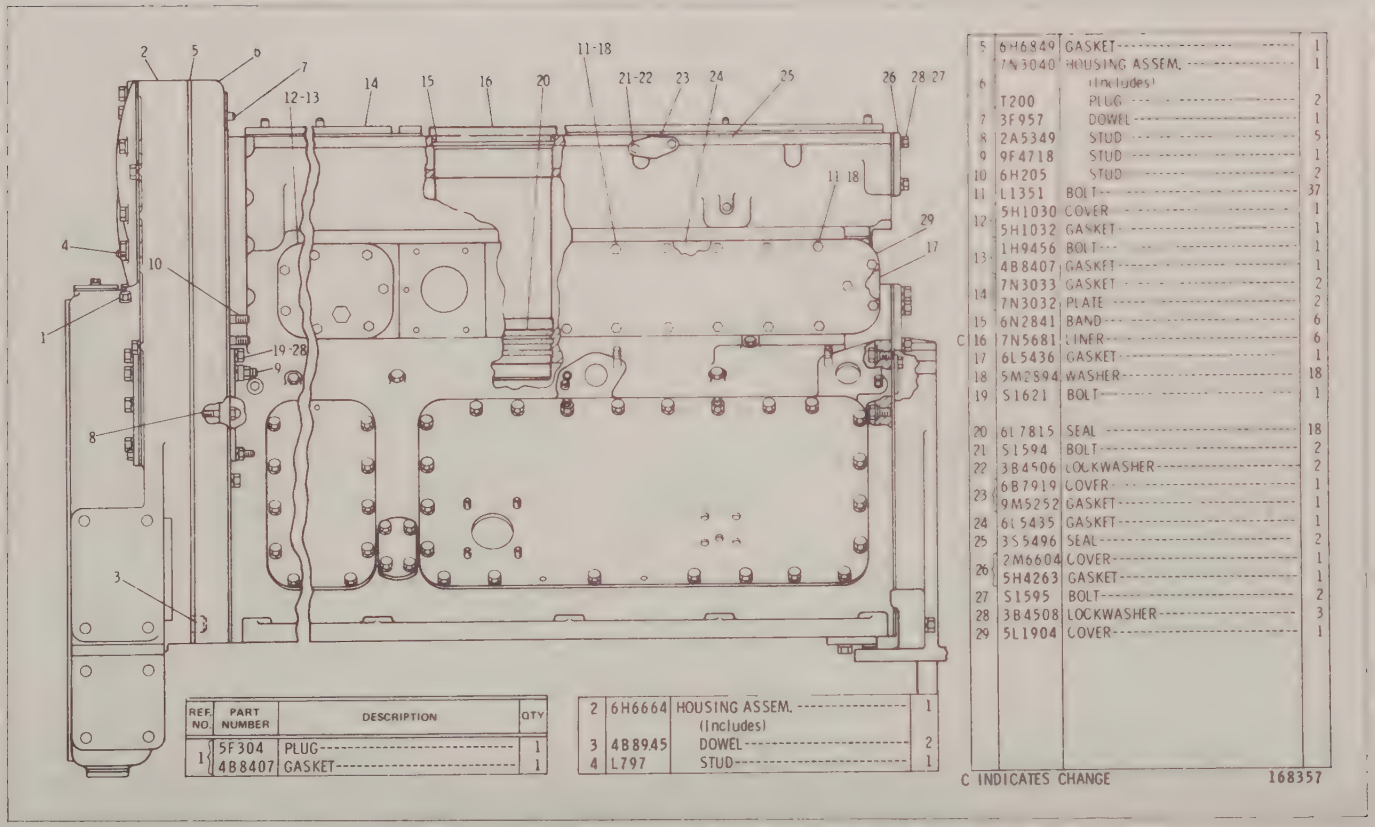
7L5469 CYLINDER BLOCK AND COVERS GROUP—Side View
Serial No. 46B6422 to 46B6446 inclusive
7N2053 Cylinder Block parts are shown on Page 28D. See Page for Gasket Kits

7L5469 CYLINDER BLOCK AND COVERS GROUP—End View

Serial No. 46B6422 to 46B6446 inclusive

Refer also to Pages 94 and 95 for special parts





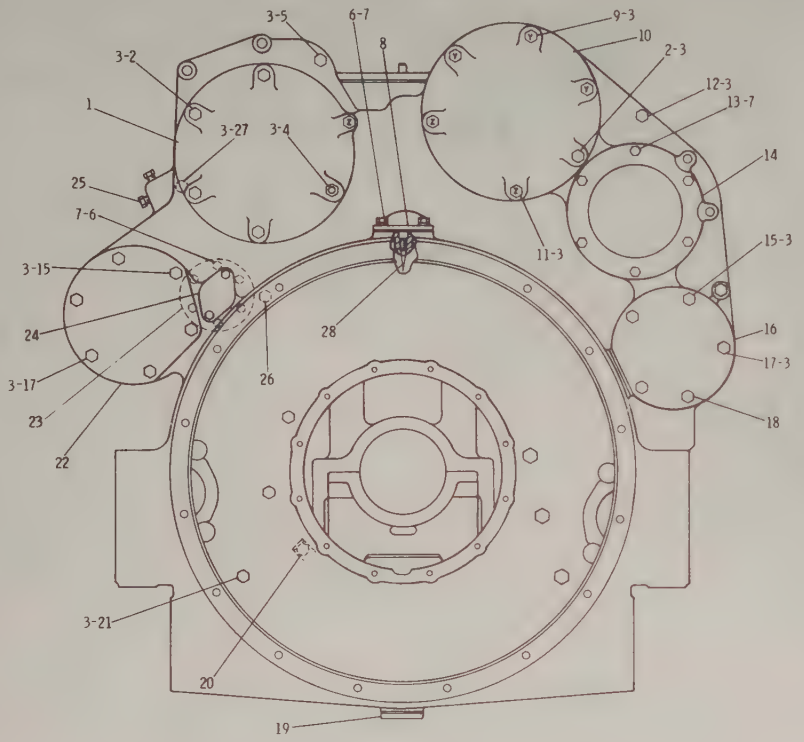
REF. NO.	PART NUMBER	DESCRIPTION	QTY
1	5F304	PLUG	1
	4B8407	GASKET	1
2	6H6664	HOUSING ASSEM. (Includes)	1
3	4B8945	DOWEL	2
4	L797	STUD	1
5	6H6849	GASKET	1
6	7N3040	HOUSING ASSEM. (Includes)	1
	T200	PLUG	2
7	3F957	DOWEL	1
8	2A5349	STUD	5
9	9F4718	STUD	1
10	6H205	STUD	2
11	L1351	BOLT	37
12	5H1030	COVER	1
	5H1032	GASKET	1
13	1H9456	BOLT	1
	4B8407	GASKET	1
14	7N3033	GASKET	2
	7N3032	PLATE	2
15	6N2841	BAND	6
C 16	7N5681	LINER	6
17	6L5436	GASKET	1
18	5M2894	WASHER	18
19	S1621	BOLT	1
20	6L7815	SEAL	18
21	S1594	BOLT	2
22	3B4506	LOCKWASHER	2
23	6B7919	COVER	1
	9M5252	GASKET	1
24	6L5435	GASKET	1
25	3S5496	SEAL	2
26	2M6604	COVER	1
	5H4263	GASKET	1
27	S1595	BOLT	2
28	3B4508	LOCKWASHER	3
29	5L1904	COVER	1

C INDICATES CHANGE

168357

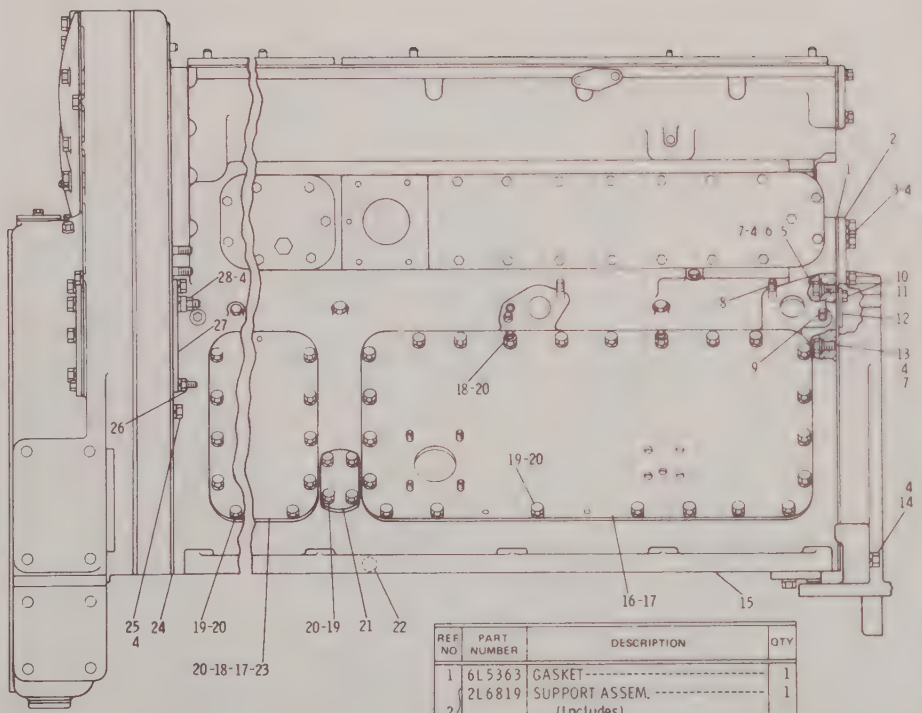
7N3041 CYLINDER BLOCK AND COVERS GROUP—Side View—Part 1 of 3
Serial No. 46B6447 to 46B7625 inclusive. See Page 31 for Gasket Kits

7N3041 CYLINDER BLOCK AND COVERS GROUP—End View—Part 2 of 3
Serial No. 46B6447 to 46B7625 inclusive



REF NO	PART NUMBER	DESCRIPTION	QTY
1	4H575	COVER	1
	4H693	GASKET	1
2	S1585	BOLT	5
3	3B4508	LOCKWASHER	33
4	1B4205	NUT	1
5	9S1366	BOLT	1
6	S1594	BOLT	10
7	3B4506	LOCKWASHER	16
8	2B8460	COVER	1
	2B6924	GASKET	1
9	2B2006	BOLT—(marked y)	3
10	3H5945	COVER	1
	3H5946	GASKET	1
11	1A7669	BOLT—(marked z)	3
12	S1573	BOLT	2
13	1A2029	BOLT	6
14	2L3564	COVER	1
	2A582	GASKET	1
15	S1621	BOLT	5
16	7H7098	COVER	1
	7H7097	GASKET	1
17	1D4569	BOLT	5
18	7H7209	BOLT	1
19	L827	PLUG	1
	L1124	GASKET	1
20	7B3235	BOLT	13
	7M7205	LOCK	11
21	8F8804	BOLT	6
22	7H7092	COVER	1
	7H7091	GASKET	1
23	4N5888	COVER	1
	7H7208	GASKET	1
24	5H2830	COVER	1
	5H2831	GASKET	1
25	5M6214	PLUG—(small)	2
26	5M6213	PLUG—(large)	1
27	L1329	BOLT	2
28	2H7911	POINTER	1

166106



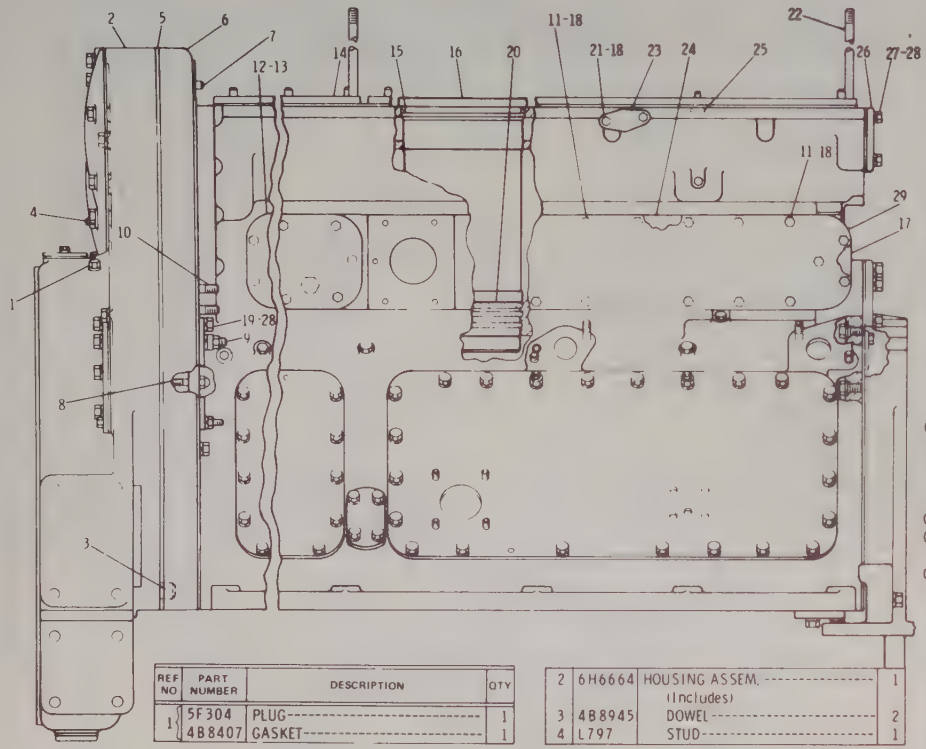
REF NO	PART NUMBER	DESCRIPTION	QTY
1	6L5363	GASKET	1
2	2L6819	SUPPORT ASSEM.	1
		(Includes)	
	6H5845	SLINGER	1

3	S1585	BOLT	12
4	3B4508	LOCKWASHER	19
5	S484	BOLT	1
6	1B4205	NUT	1
7	2B4823	WASHER	2
	4F5675	SEAL	2
8	8F9635	STUD	2
9	1A1593	STUD	2
10	1L1351	BOLT	1
11	L364	LOCK	1
12	7H4258	FLANGE ASSEM.	1
		(Includes)	
	3F4335	DOWEL	1
13	1A1460	BOLT	1
14	1A5822	BOLT	2
15	7N1497	BLOCK ASSEM.	1
		(Separate Illustration)	
16	5L5028	COVER ASSEM.	1
		(Includes)	
	5M9621	STUD	4
17	6L5490	GASKET	2
18	1B4203	NUT	4
19	S1594	BOLT	46
20	3B4506	LOCKWASHER	50
21	6H6852	COVER	1
	6L5386	GASKET	1
22	S1592	BOLT	1
	3B4510	LOCKWASHER	1
23	5H4180	COVER	1
24	7N3034	GASKET	1
25	V375	BOLT	2
26	1D4718	NUT	1
	3B4507	LOCKWASHER	1
27	5B5590	COVER	1
	5B9656	GASKET	1
28	1D4719	NUT	1
	1B8074	WASHER	1

213279

7N3041 CYLINDER BLOCK AND COVERS GROUP—Side View—Part 3 of 3
Serial No. 46B6447 to 46B7625 inclusive
7N1497 Cylinder Block parts are shown on Page 28E

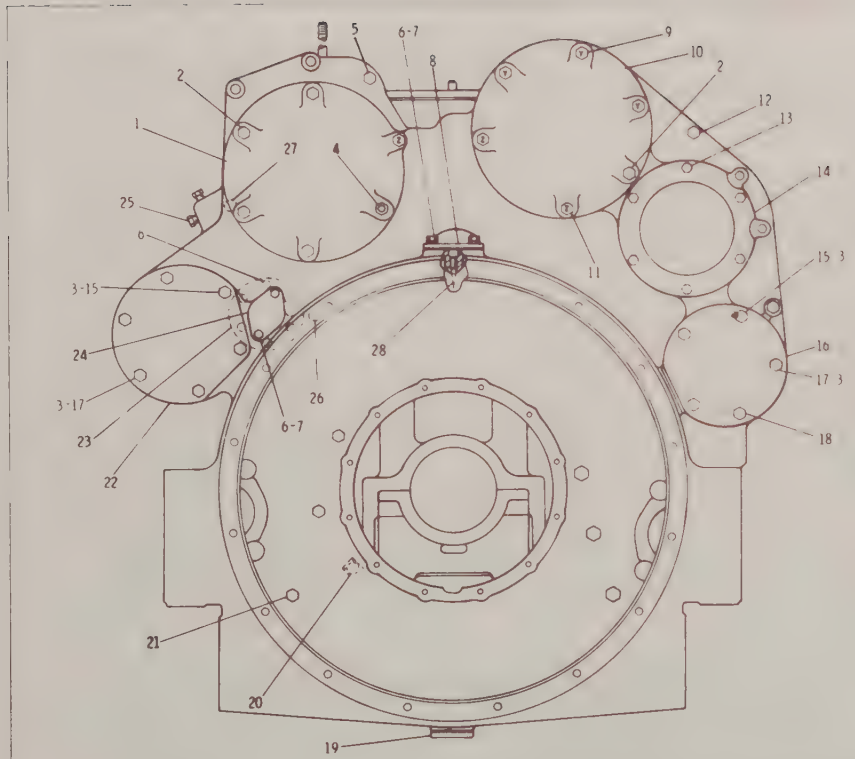
7N3041 CYLINDER BLOCK AND COVERS GROUP—Side View—Part 1 of 3
Serial No. 46B7626—Up
See Page 31 for Gasket Kits



REF NO	PART NUMBER	DESCRIPTION	QTY
1	5F304	PLUG	1
	4B8407	GASKET	1
2	6H6664	HOUSING ASSEM. (Includes)	1
3	4B8945	DOWEL	2
4	L797	STUD	1
5	6H6849	GASKET	1
6	7N3040	HOUSING ASSEM. (Includes)	1
	T200	PLUG	2
7	3F957	DOWEL	1
8	2A5349	STUD	5
9	9F4718	STUD	1
10	6H205	STUD	2
11	L1351	BOLT	37
12	5H1030	COVER	1
	5H1032	GASKET	1
13	1H9456	BOLT	1
	4B8407	GASKET	1
14	7N3033	GASKET	2
	7N3032	PLATE	2
C 15	8N4708	BAND	6
C 16	7N5681	LINER	6
17	6L5436	GASKET	1
C 18	5M2894	WASHER	20
19	S1621	BOLT	1
20	6L7815	SEAL	18
21	S1594	BOLT	2
C 22	9F8560	STUD	2
23	6B7919	COVER	1
	9M5252	GASKET	1
24	6L5435	GASKET	1
25	3S5496	SEAL	2
C 26	8N968	COVER	1
C	8N967	GASKET	1
27	S1595	BOLT	2
C 28	5P8245	WASHER	3
29	5L1904	COVER	1

C INDICATES CHANGE

172257

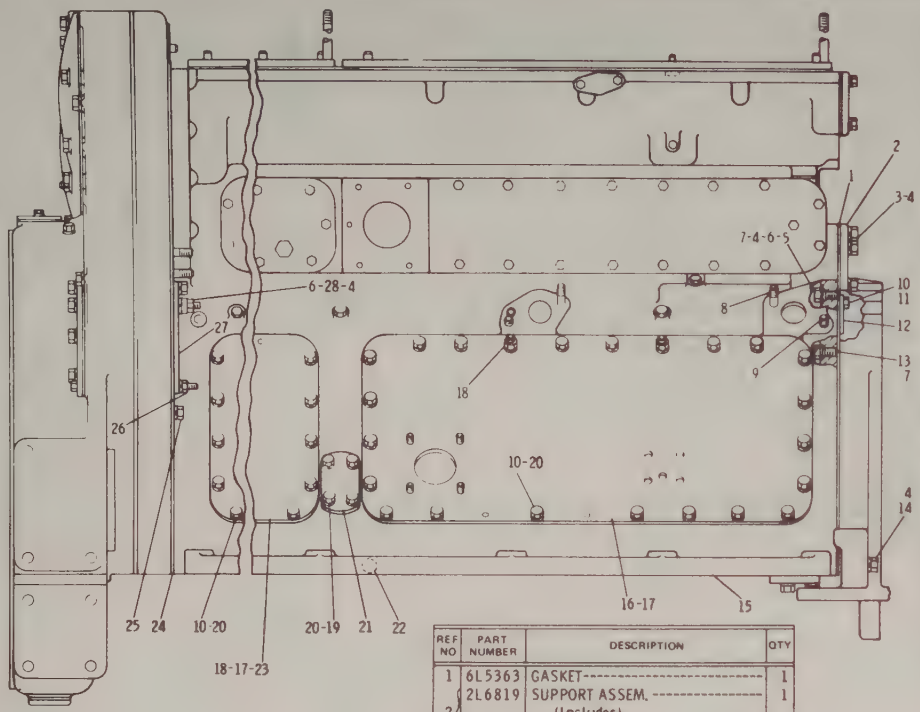


	REF NO	PART NUMBER	DESCRIPTION	QTY
	1	4H575	COVER	1
		4H693	GASKET	1
	2	S1585	BOLT	5
C	3	5P8245	WASHER	10
	4	1B4205	NUT	1
C	5	2B947	BOLT	1
	6	S1594	BOLT	10
C	7	5M2894	WASHER	4
	8	2B8460	COVER	1
		2B6924	GASKET	1
C	9	8S9089	BOLT (marked y)	3
	10	3H5945	COVER	1
		3H5946	GASKET	1
C	11	9M7269	BOLT (marked z)	3
C	12	1B2896	BOLT	2
	13	1A2029	BOLT	6
	14	2L3564	COVER	1
		2A582	GASKET	1
C	15	6H1717	BOLT	5
	16	7H7098	COVER	1
		7H7097	GASKET	1
	17	1D4569	BOLT	5
	18	7H7209	BOLT	1
	19	L827	PLUG	1
		L1124	GASKET	1
	20	7B3235	BOLT	13
		7M7205	LOCK	11
C	21	1D4572	BOLT	6
	22	7H7092	COVER	1
		7H7091	GASKET	1
	23	4N5888	COVER	1
		7H7208	GASKET	1
	24	5H2830	COVER	1
		5H2831	GASKET	1
	25	5M6214	PLUG (small)	2
	26	5M6213	PLUG (large)	1
	27	L1329	BOLT	2
	28	2H7911	POINTER	1

C INDICATES CHANGE 172258

7N3041 CYLINDER BLOCK AND COVERS GROUP—End View—Part 2 of 3
Serial No. 46B7626—Up

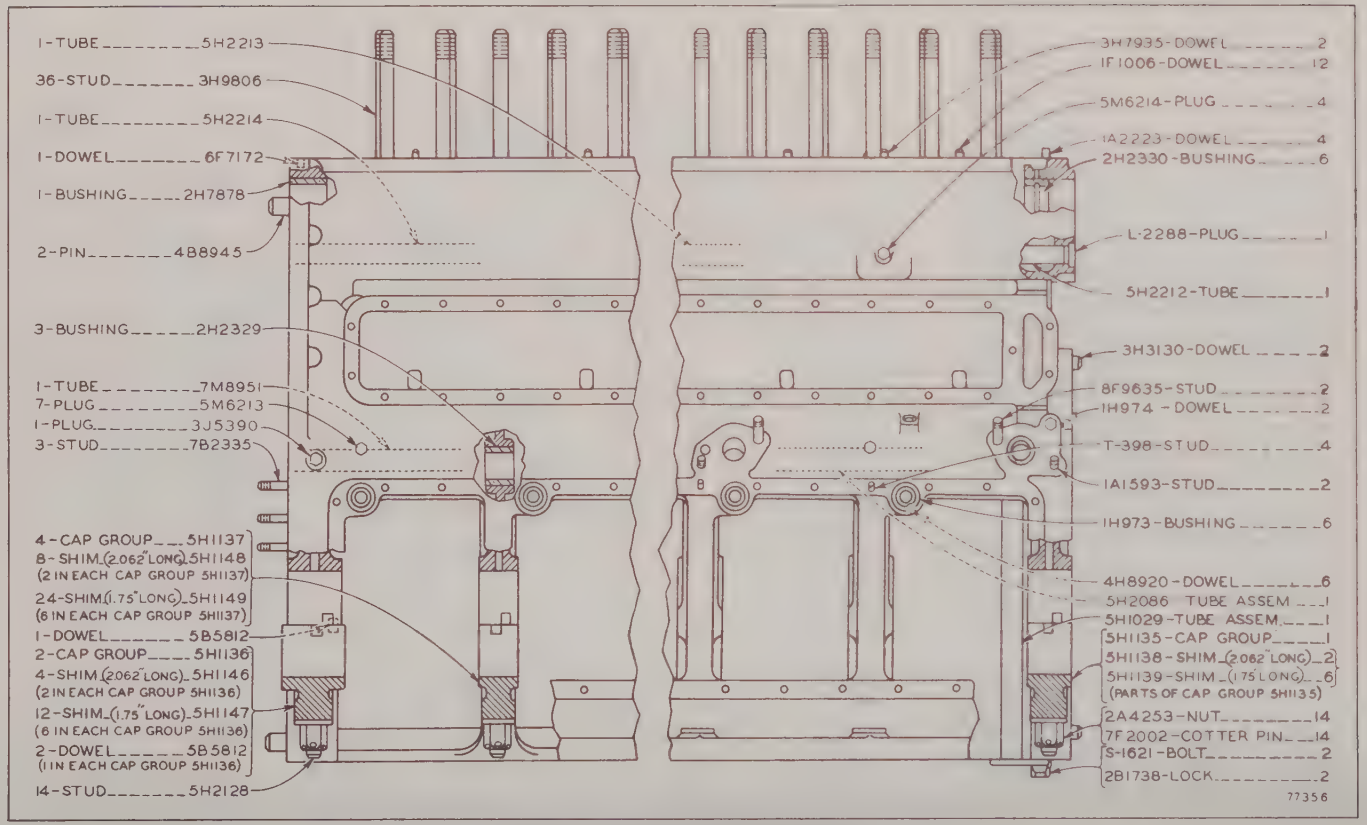
7N3041 CYLINDER BLOCK AND COVERS GROUP—Side View—Part 3 of 3
Serial No. 46B7626—Up
7N1497 Cylinder Block parts are shown on Page 28E



REF NO	PART NUMBER	DESCRIPTION	QTY
1	6L5363	GASKET	1
2	2L6819	SUPPORT ASSEM. (Includes)	1
	6H5845	SLINGER	1

	3	S1585	BOLT — 12
C	4	5P8245	WASHER — 16
	5	S484	BOLT — 1
C	6	1B4205	NUT — 2
	7	2B4823	WASHER — 2
		4F5675	SEAL — 2
	8	8F9635	STUD — 2
	9	1A1593	STUD — 2
C	10	L1351	BOLT — 45
	11	L364	LOCK — 1
	12	7H4258	FLANGE ASSEM. (Includes) — 1
		3F4335	DOWEL — 1
	13	1A1460	BOLT — 1
	14	1A5822	BOLT — 2
	15	7N1497	BLOCK ASSEM. (Separate Illustration) — 1
	16	5L5028	COVER ASSEM. (Includes) — 1
		5M9621	STUD — 4
	17	6L5490	GASKET — 2
	18	1B4203	NUT — 4
C	19	S1594	BOLT — 4
C	20	5M2894	WASHER — 50
	21	6H6852	COVER — 1
		6L5386	GASKET — 1
	22	S1592	BOLT — 1
C		5P8247	WASHER — 1
	23	5H4180	COVER — 1
	24	7N3034	GASKET — 1
C	25	L1329	BOLT — 1
	26	1D4718	NUT — 1
C		5P8244	WASHER — 2
C	27	7N7595	COVER — 1
C		9F7283	SEAL — 1
	28	1B8074	WASHER — 1

C INDICATES CHANGE 172259

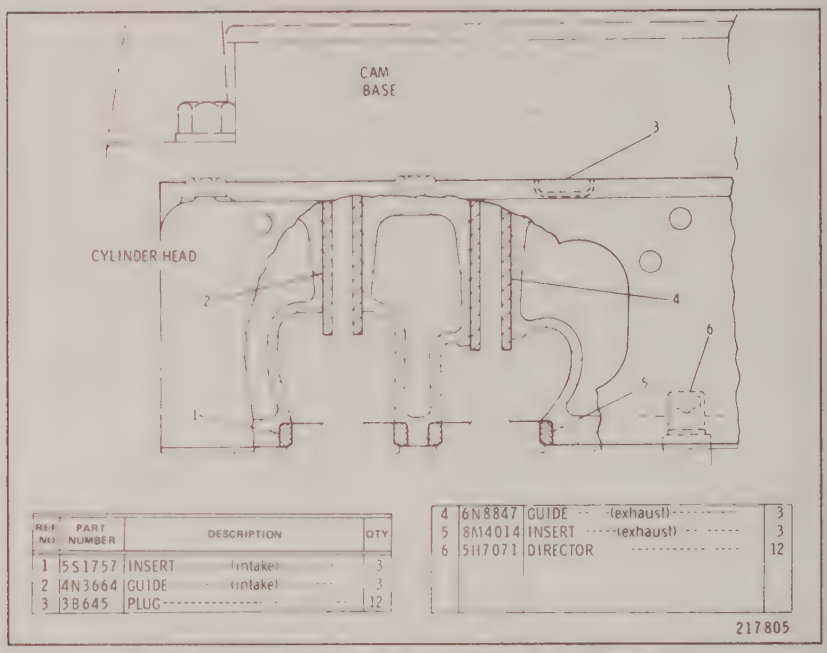


4M7000 CYLINDER BLOCK ASSEMBLY

Part of Cylinder Block and Covers shown on Pages 24 and 26

		Consists of:	Page
1	7N1497	Cylinder Block Assembly	28E
2	7N3630	Cylinder Head Assembly	28-2
2	7N3083	Gasket--Cylinder Head	
2	7N3032	Spacer--Plate	
38	1D4624	Bolt--19mm (3/4 inches) x 229 mm (9 inches)	
1	7N3034	Gasket	
10	2A1531	Bolt--13 mm (1/2 inches) x 127 mm (6 inches)	
1	7N5582	Lifting--Eye	
1	7N5591	Lifting--Eye	
1	7N5590	Plate	
2	684117	Bolt--19mm (3/4 inches) x 273 mm (10.75 Length)	
2	6N3376	Washer	
38	5H1504	Washer	
2	8F4225	Bolt--19 mm (3/4 inches) x 254 mm (10 inches)	
16	7N6244	Seal	
24	7N6243	Seal	

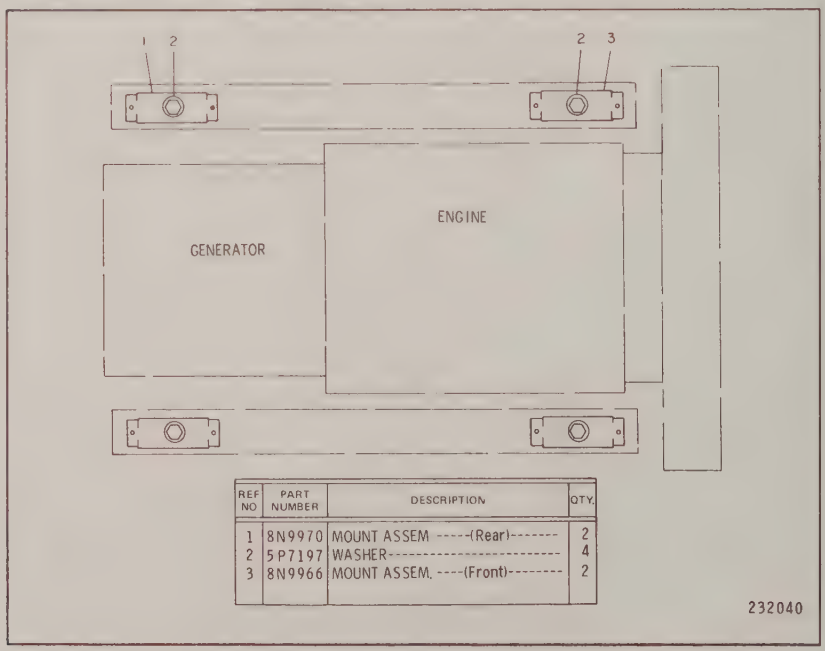
7N4013 CYLINDER BLOCK GROUP—Field Installation
Serial No. 46B1558 to 46B6446 inclusive
NOTE: Converts Counterbored Cylinder Block to Spacer Plate Cylinder Block



REF NO	PART NUMBER	DESCRIPTION	QTY
1	5S1757	INSERT (intake)	3
2	4N3664	GUIDE (intake)	3
3	3B645	PLUG	12
4	6N8847	GUIDE (exhaust)	3
5	8M4014	INSERT (exhaust)	3
6	5H7071	DIRECTOR	12

217805

7N3630 CYLINDER HEAD ASSEMBLY—Field Installation
Serial No. 46B1558 to 46B6446 Inclusive
Part of 7N4013 Cylinder Block Group shown on Page 28-1

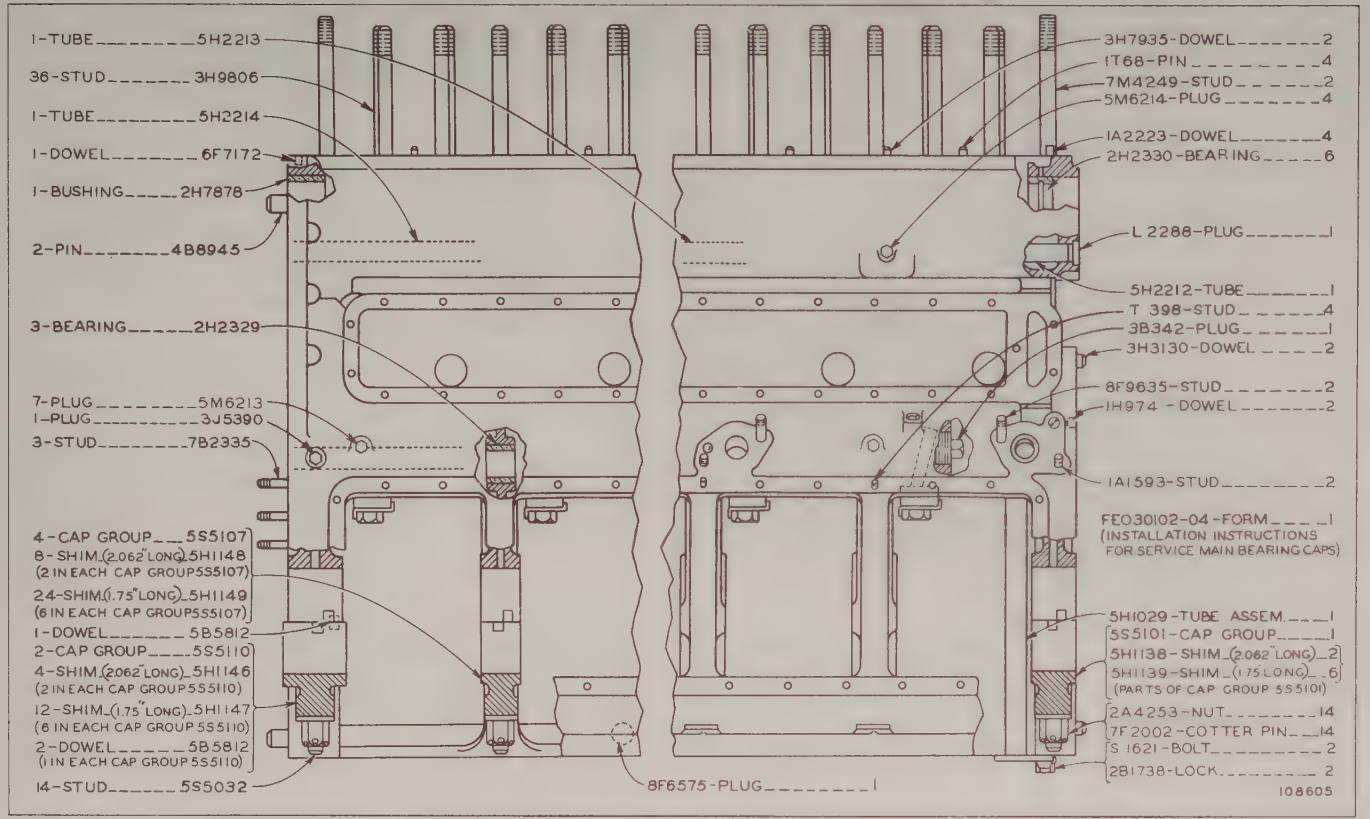


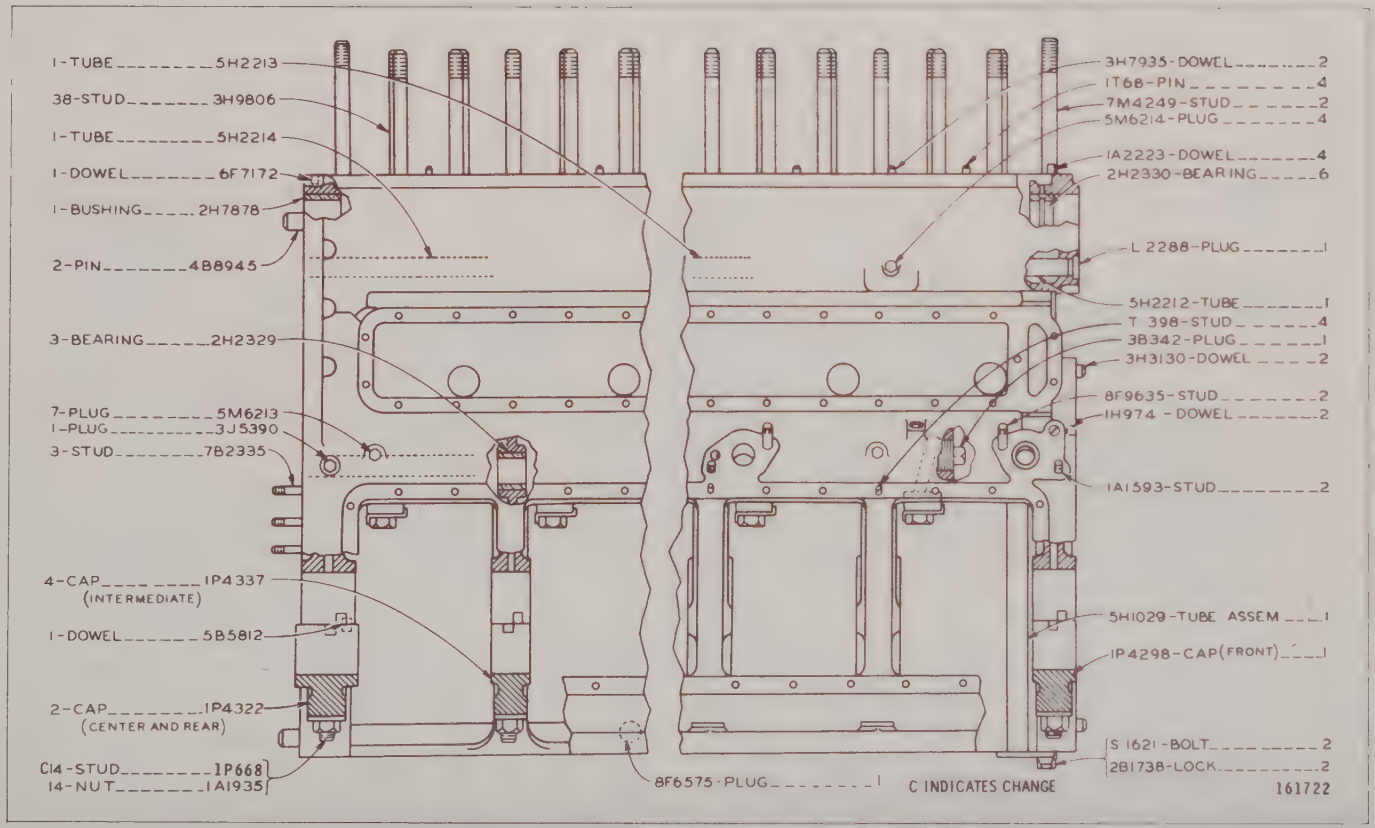
REF NO	PART NUMBER	DESCRIPTION	QTY.
1	8N9970	MOUNT ASSEM. (Rear)	2
2	5P7197	WASHER	4
3	8N9966	MOUNT ASSEM. (Front)	2

232040

8N9566 ENGINE MOUNTING GROUP—Flexible
AN ATTACHMENT

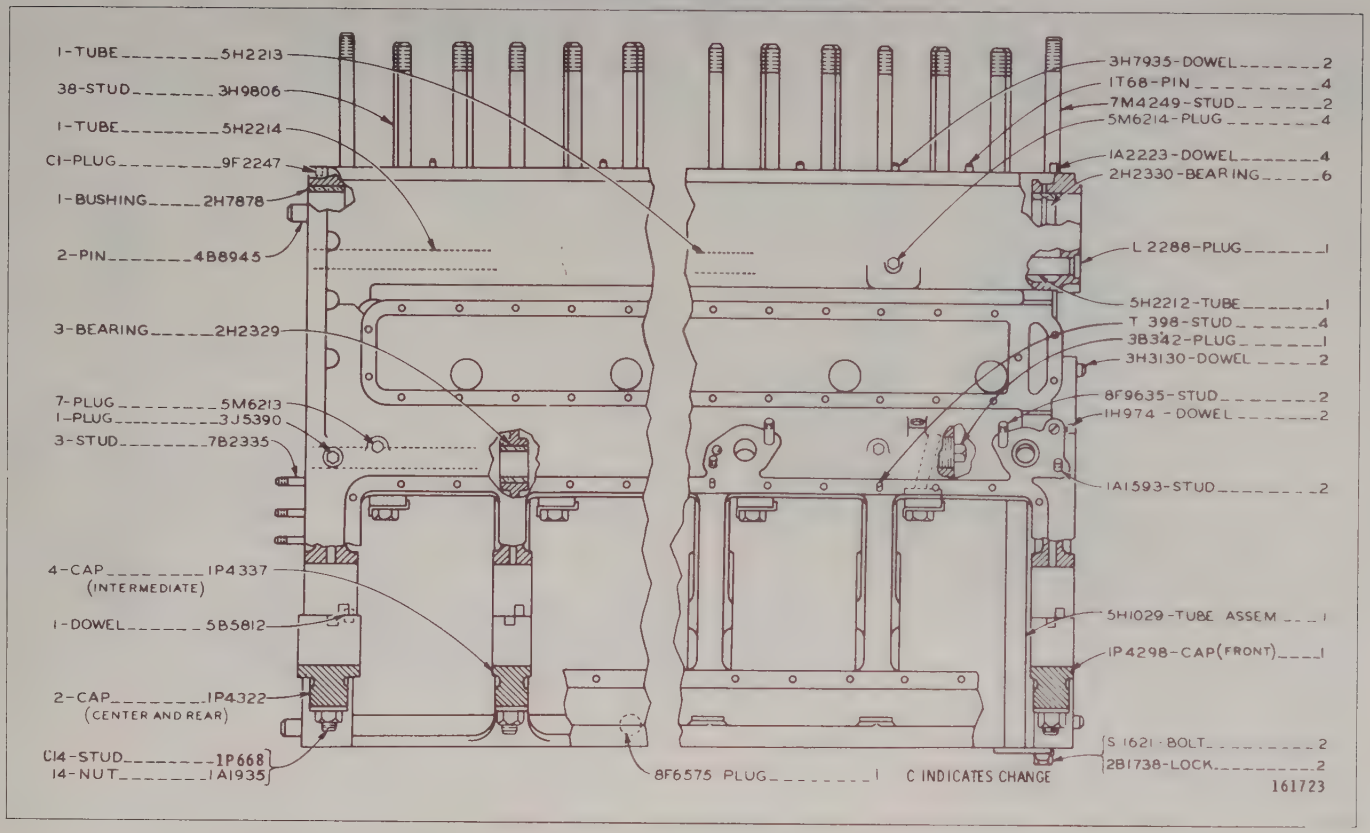
5S5098 CYLINDER BLOCK ASSEMBLY—Type 1
Serial No. 46B2276 to 46B4561 inclusive and 77B236—Up
Part of Cylinder Block and Covers shown on Pages 26B, 26D and 26F

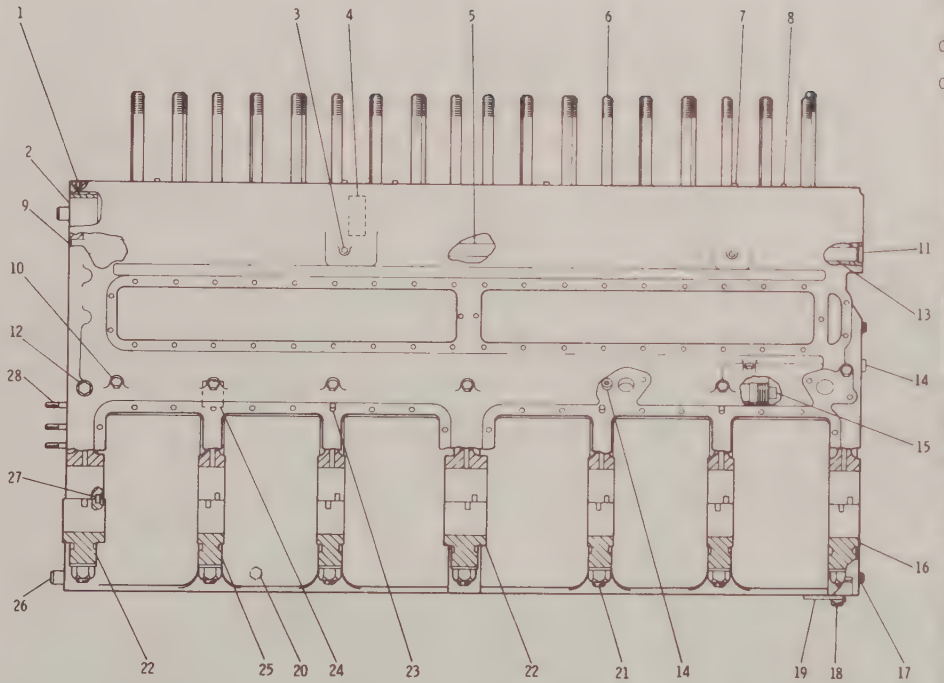




5S5098 CYLINDER BLOCK ASSEMBLY—Type 2
Serial No. 46B2276 to 46B4561 inclusive and 77B236—Up
Part of Cylinder Block and Covers shown on Pages 26B, 26D and 26F

5S5098 CYLINDER BLOCK ASSEMBLY
Serial No. 46B4562 to 46B6422 inclusive
Part of Cylinder Block and Covers shown on Pages 26F & 26H





	REF NO.	PART NUMBER	DESCRIPTION	QTY
C	1	9F2247	PLUG	1
	2	2H7878	BUSHING	1
C	3	5M6214	PLUG	4
	4	2H2330	BEARING	6
	5	5H2213	TUBE	1
	6	3H9806	STUD	35
	7	1T68	PIN (spring-slotted)	4
		3H7935	DOWEL	2
	8	1A2223	DOWEL	4
	9	5H2214	TUBE	1
	10	5M6213	PLUG	7
	11	L2288	PLUG	1
	12	3J5390	PLUG	1
	13	5H2212	TUBE	1
	14	1H974	DOWEL	2
	15	3B342	PLUG	1
	16	1P4298	CAP (front)	1
	17	3H3130	DOWEL	2
	18	S1621	BOLT	2
		2B1738	LOCK	2
	19	5H1029	TUBE ASSEM.	1
	20	8F6575	PLUG	1
	21	1P668	STUD	14
		1A1935	NUT	14
	22	1P4322	CAP (center & rear)	2
	23	T398	STUD	4
	24	2H2329	BEARING	3
	25	1P4337	CAP	4
	26	4B8945	DOWEL	2
	27	5B5812	DOWEL	1
	28	7B2335	STUD	3
		GMG00633	FORM (Installing Bearing Caps)	1

C INDICATES CHANGE

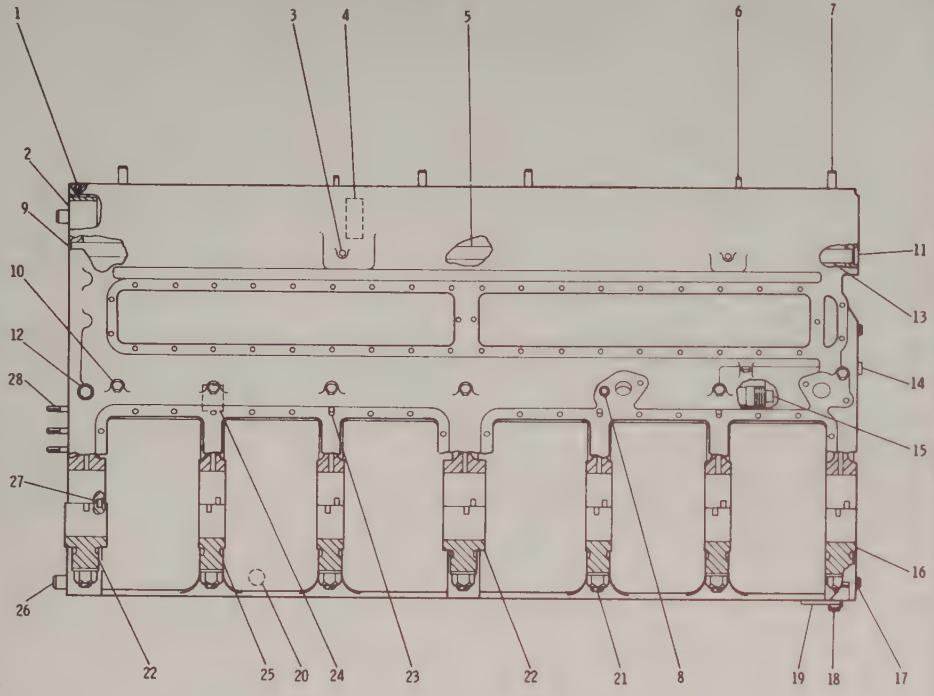
165723

7N2053 CYLINDER BLOCK ASSEMBLY
Serial No. 46B6422 to 46B6446 inclusive
Part of 7L5469 Cylinder Block and Covers Group shown on Page 27A

7N1497 CYLINDER BLOCK ASSEMBLY

Serial No. 46B6447—Up

Part of 7N3041 Cylinder Block and Covers and 7N4013 Cylinder Block Groups shown on Pages 27E, 27H and 28-1

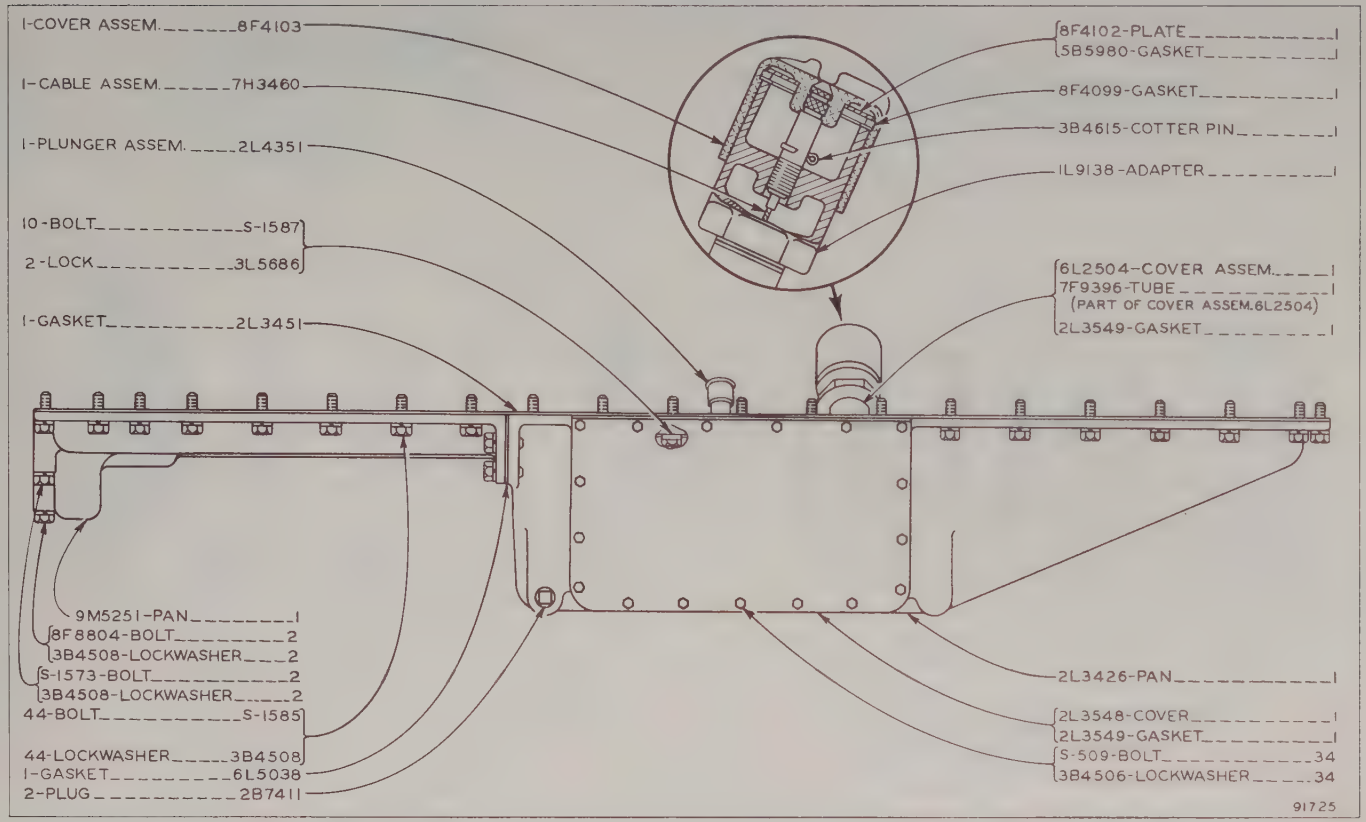


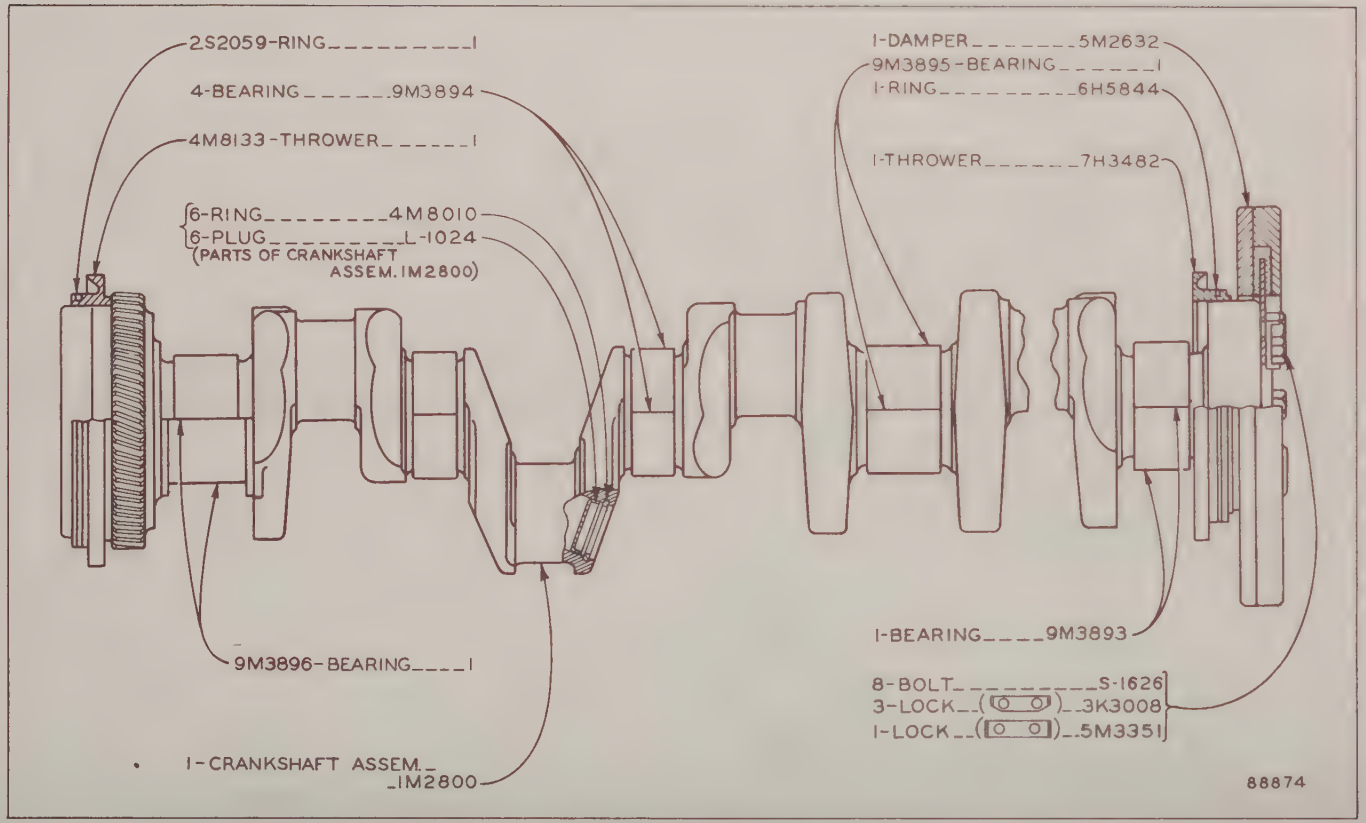
REF. NO.	PART NUMBER	DESCRIPTION	QTY.
1	9F2247	PLUG	1
2	2H7878	BUSHING	1
3	5M6214	PLUG	4
4	2H2330	BEARING	6
5	5H2213	TUBE	1
6	1S9540	DOWEL	2
7	1A2610	DOWEL	4
8	7H3171	PLUG	1
9	5H2214	TUBE	1
10	5M6213	PLUG	7
11	L2288	PLUG	1
12	3J5390	PLUG	1
13	5H2212	TUBE	1
14	1H974	DOWEL	1
15	1B5170	PLUG	1
16	1P4298	CAP (front)	1
17	3H3130	DOWEL	2
18	1S1621	BOLT	2
	2B1738	LOCK	2
19	5H1029	TUBE ASSEM.	1
20	8F6575	PLUG	1
21	1P668	STUD	14
	1A1935	NUT	14
22	1P4322	CAP (center & rear)	2
23	T398	STUD	4
24	2H2329	BEARING	3
25	1P4337	CAP	4
26	4B8945	DOWEL	2
27	5B5812	DOWEL	1
28	7B2335	STUD	3
	GMG00633	FORM (Installing Bearing Caps)	1

213377

2L3512 OIL PAN GROUP

Refer also to Page 153 for special parts.



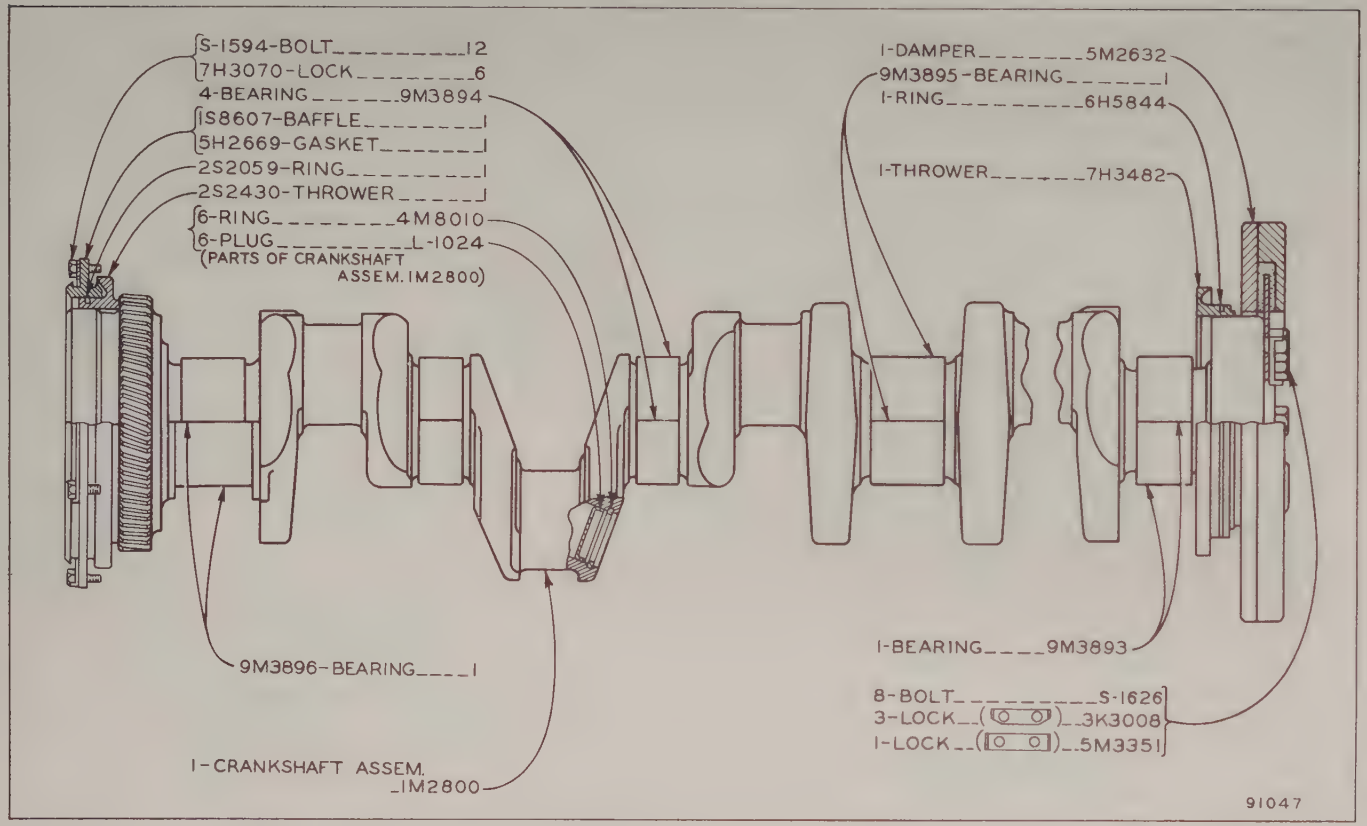


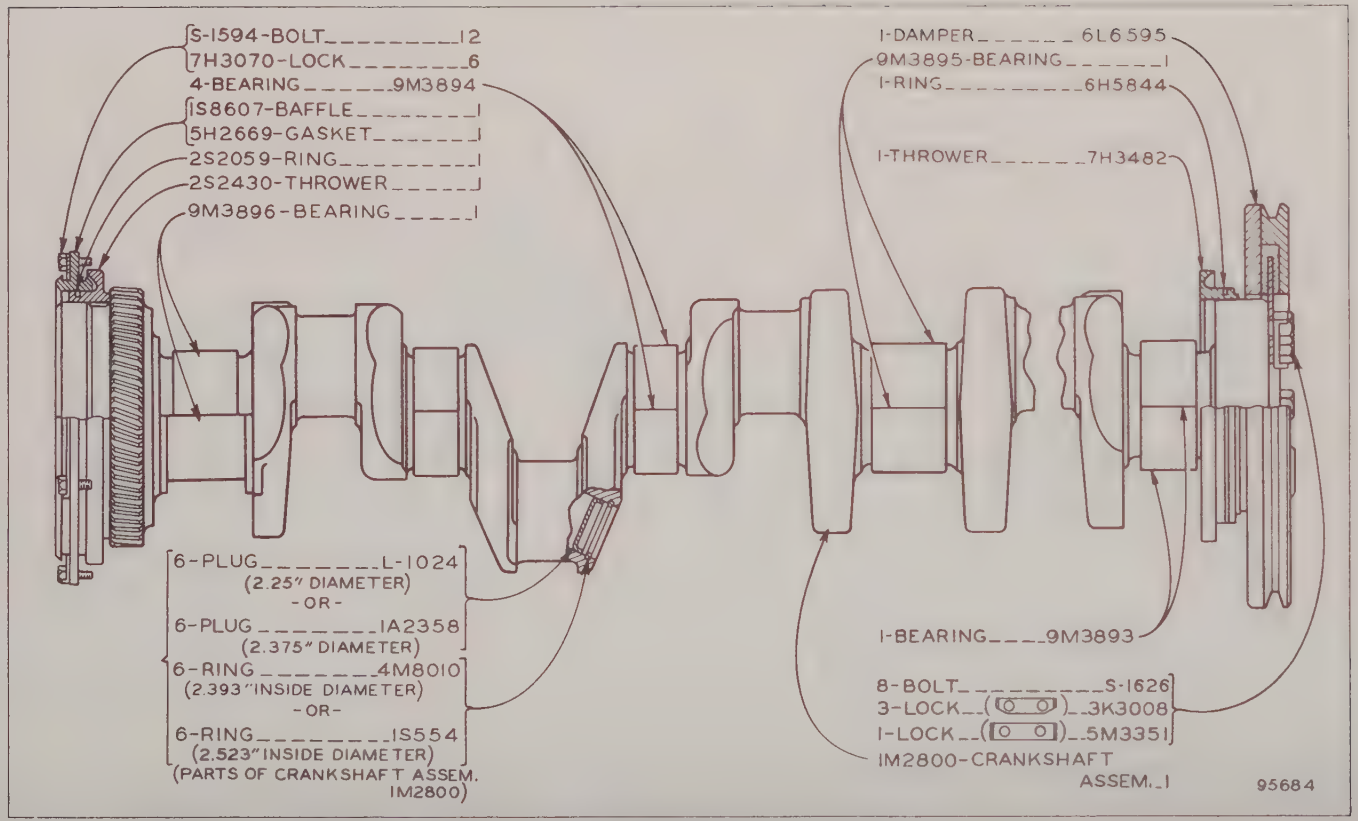
CRANKSHAFT
Serial No. 77B1 to 77B121 inclusive
Refer also to Page 158 for special parts

CRANKSHAFT

SERIAL NO. 46B1558 TO 46B1855 INCLUSIVE AND 77B122 TO 77B130 INCLUSIVE

REFER ALSO TO PAGE 158 FOR SPECIAL PARTS



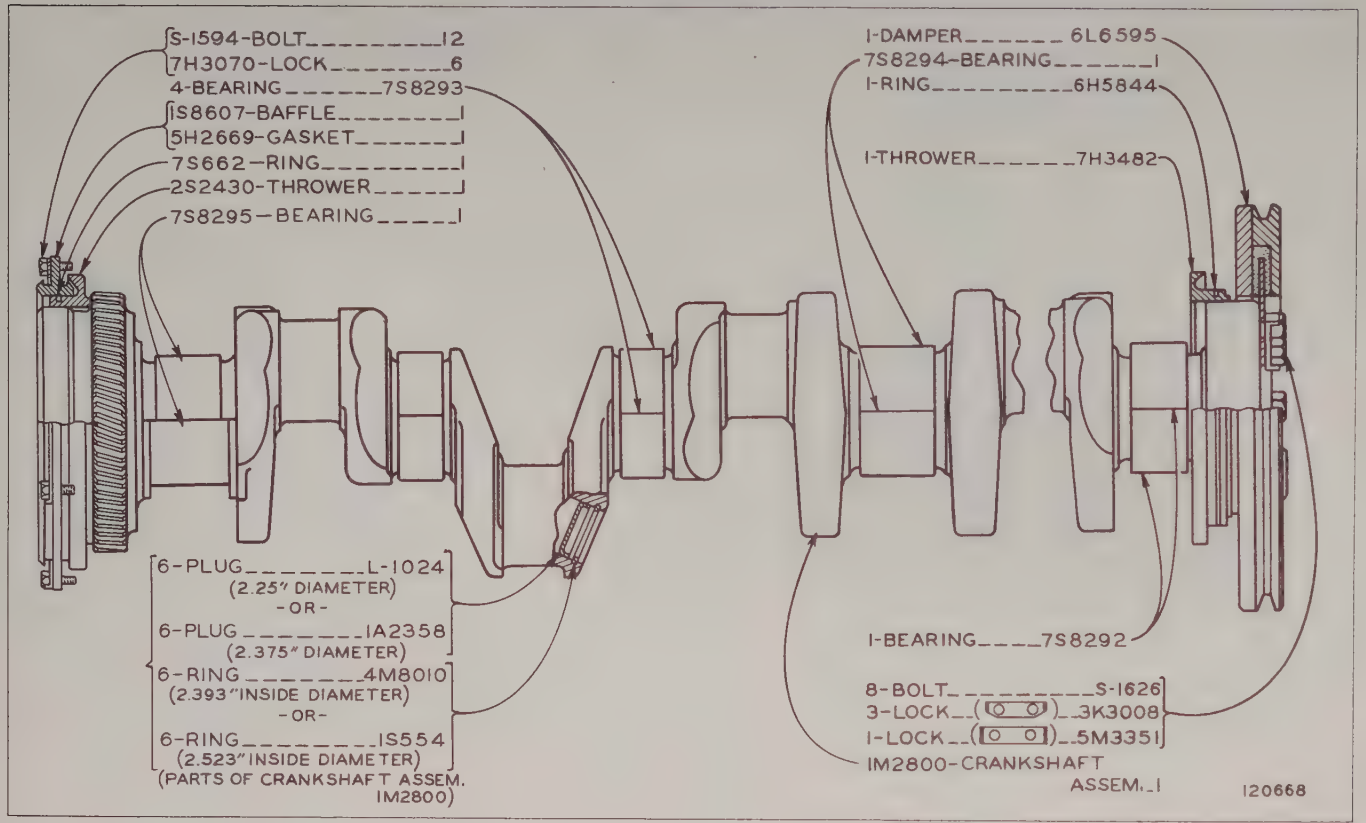


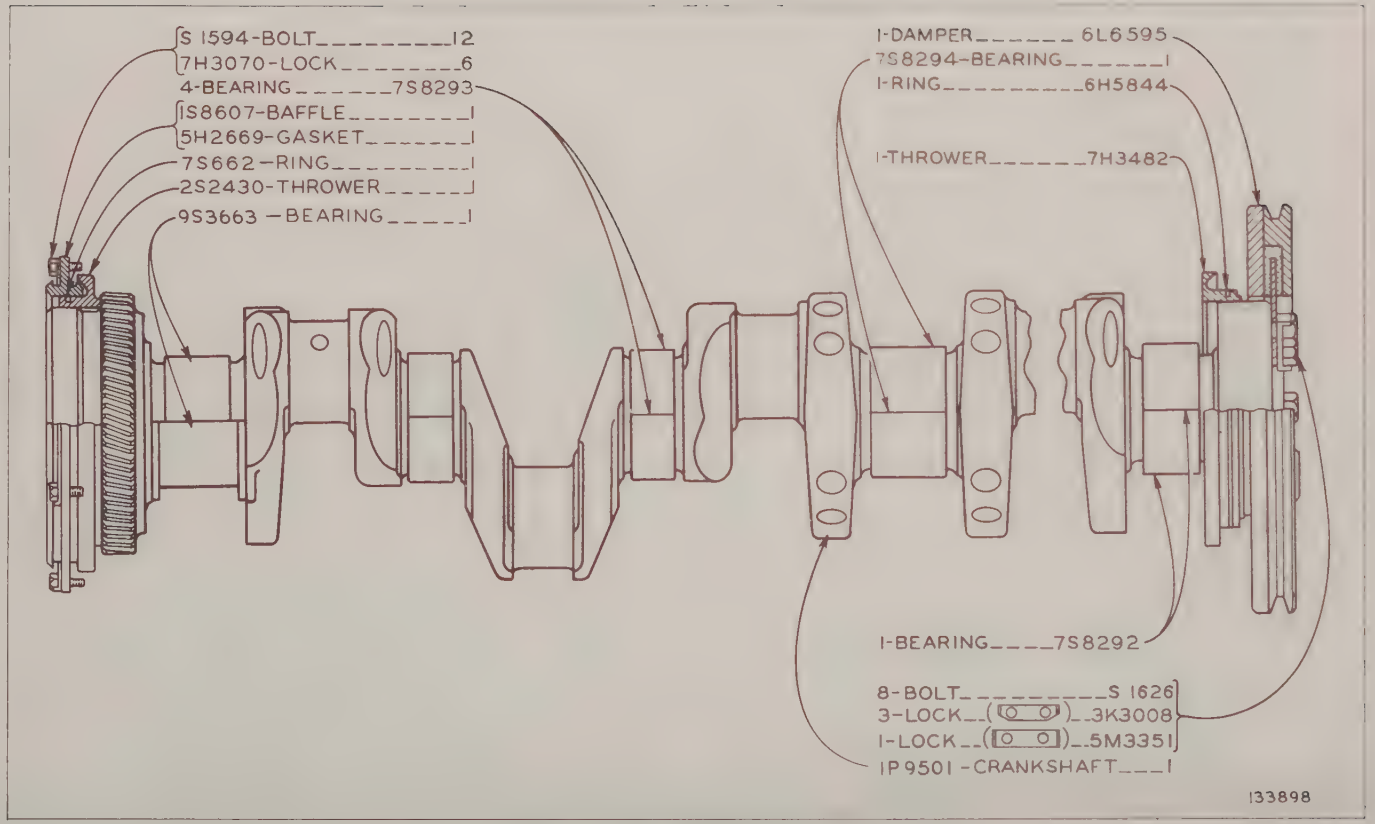
CRANKSHAFT

SERIAL NO. 46B1856 TO 46B2275 INCLUSIVE AND 77B131 TO 77B235 INCLUSIVE

REFER ALSO TO PAGE 158 FOR SPECIAL PARTS

CRANKSHAFT (7L5468 N/S)
Serial No. 46B2276 to 46B3674 inclusive and 77B236–Up
Refer also to Page 158 for special parts





7L5468 CRANKSHAFT GROUP
Serial No. 46B3675—Up
Refer also to Page 158 for special parts

5P8964	Valve Grinding Complete
5P8965	Valve Grinding Single Head
5P8969	Central and Lower Structure
5P8970	Liner Single Cylinder
5P8971	Front Structure
5P8972	Rear Structure
5P8977	Aftercooler
5P8981	Oil Lines
5P8982	Fuel System
5P8966	Water Cooled Manifold
5P8968	Dry Manifold
5P8974	Water Pump
5P8975	Turbocharger
5P8980	Oil Cooler

GASKET KITS
FOR USE WITH 7N3199 ENGINE ARRANGEMENT
Serial No. 46B6447—Up

Consists of:

5P8964	Valve Grinding Complete
5P8965	Valve Grinding Single Head
6V1878	Central and Lower Structure
5P8970	Single Cylinder Liner
6V1879	Front Structure
5P8972	Rear Structure
5P8968	Dry Manifold
5P8966	Wet Manifold
5P8974	Water Pump
5P8977	Aftercooler
5P8840	Turbocharger
6V1692	Fuel System
6V1880	Oil Cooler Lines
6V1691	Oil Pump

GASKET KITS
FOR USE WITH 7N4374 ENGINE ARRANGEMENT
Serial No. 46B6559—Up

CYLINDER BLOCK NOT REBORED

CRANKSHAFT GROUND FOR UNDERSIZE BEARING I.D. OF .025 IN. .050 IN.

	QTY.			
FRONT	1	9M4872	9M4877	
INTERMEDIATE	4	9M4873	9M4878	
CENTER	1	9M4874	9M4879	
REAR	1	9M4875	9M4880	

CRANKSHAFT BEARING REPLACEMENTS
Serial No. 46B1558 to 46B2275 inclusive and 77B1 to 77B235 inclusive

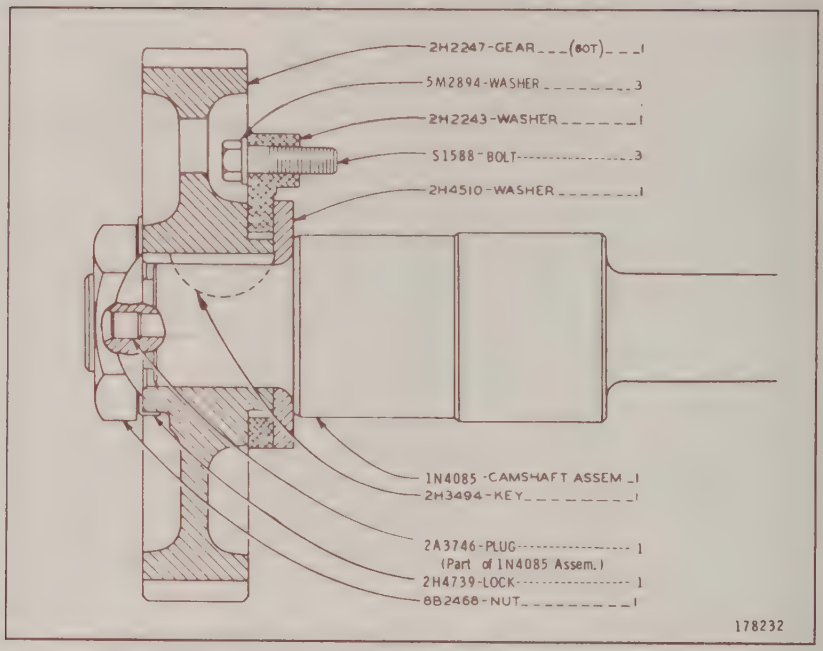
GASKET KITS

6V2936	VALVE GRINDING COMPLETE
6V2937	VALVE GRINDING SINGLE HEAD
6V2929	CENTRAL AND LOWER STRUCTURE
5P8970	SINGLE CYLINDER LINER
6V1879	FRONT STRUCTURE
6V2939	REAR STRUCTURE
5P8968	DRY MANIFOLD
5P8966	WET MANIFOLD
5P8974	WATER PUMP
5P8977	AFTERCOOLER AND AFTERCOOLER LINES
6V2958	TURBOCHARGER SERIAL NO. 46B870 TO 46B1513 INCLUSIVE
6V1962	TURBOCHARGER SERIAL NO. 46B1514--UP
6V2959	FUEL SYSTEM SERIAL NO. 46B870 TO 46B5064 INCLUSIVE
5P8982	FUEL SYSTEM SERIAL NO. 46B5065--UP
6V2931	OIL COOLER AND LINES

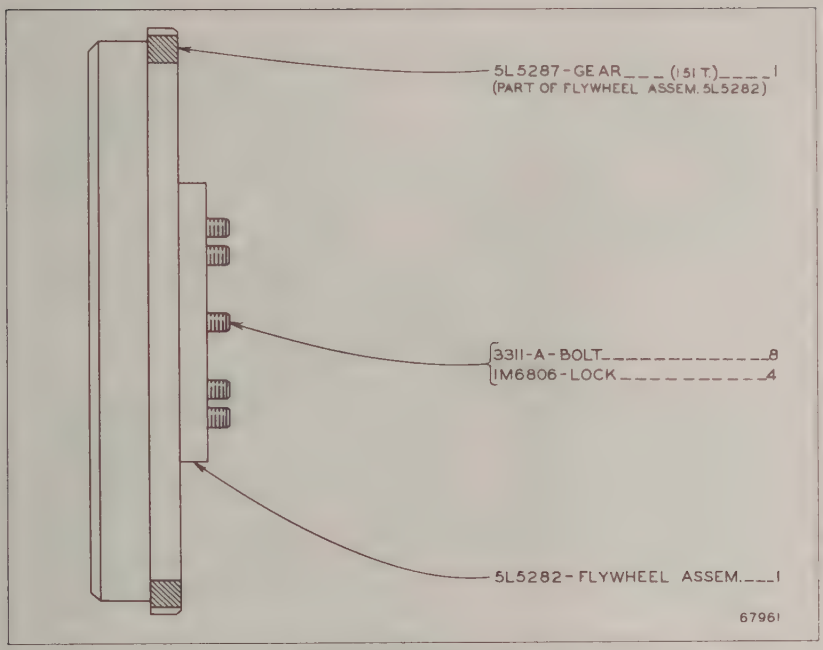
GASKET KITS
Serial No. 46B1558 to 46B6446 inclusive

CYLINDER BLOCK NOT REBORED				
CRANKSHAFT GROUND FOR UNDERSIZE BEARING I.D. OF		.025 IN.	.050 IN.	
	QTY.			
FRONT	1	7S8304	7S8309	
INTERMEDIATE	4	7S8305	7S8310	
CENTER	1	7S8306	7S8311	
REAR	1	9S7576	9S7577	
CYLINDER BLOCK REBORED (.025 IN.) (BEARING OVERSIZE O.D.)				
CRANKSHAFT GROUND FOR UNDERSIZE BEARING I.D. OF		0 (STANDARD)	.025 IN.	
	QTY.			
FRONT	1	6N1653	6N1651	
INTERMEDIATE	4	6N1650	6N1649	
CENTER	1	6N1648	6N1647	
REAR	1	6N1654	6N1652	
O.D.--OUTSIDE DIAMETER I.D.--INSIDE DIAMETER				

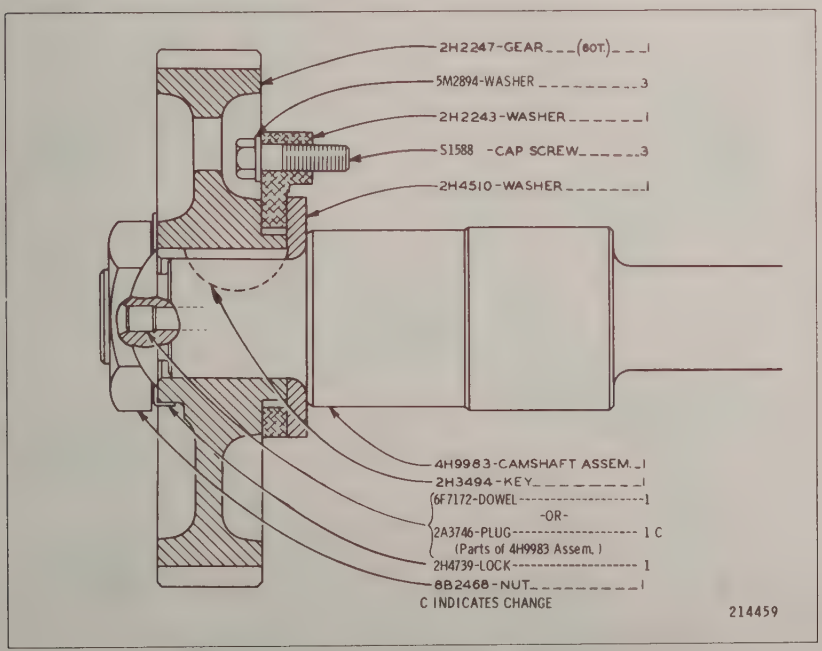
CRANKSHAFT BEARING REPLACEMENTS
Serial No. 46B2276—Up and 77B236—Up



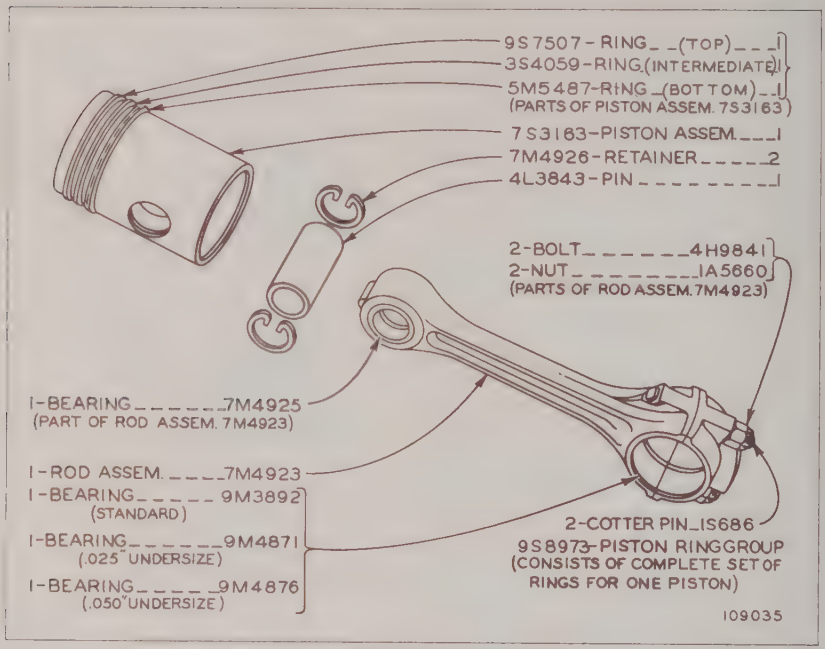
1N4568 CAMSHAFT GROUP



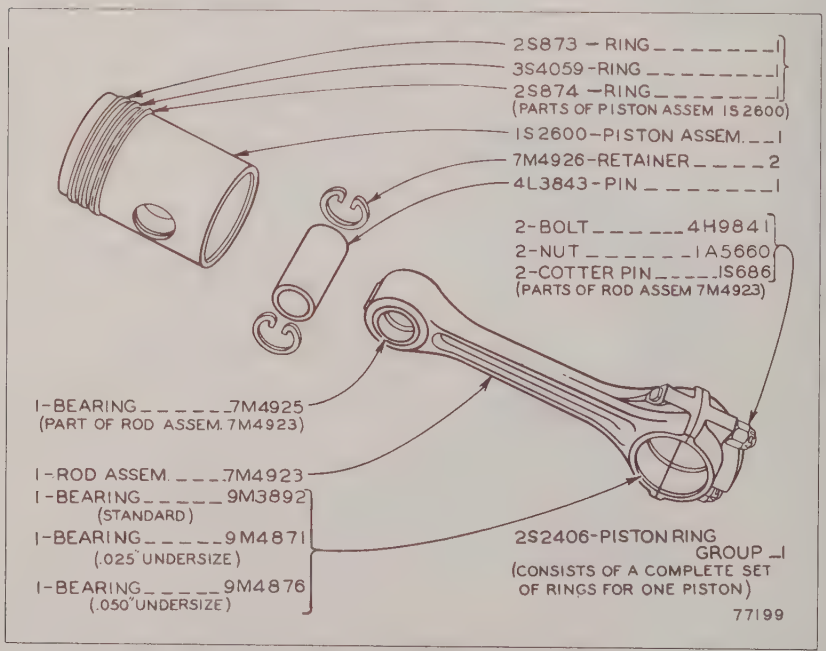
5L3278 FLYWHEEL GROUP



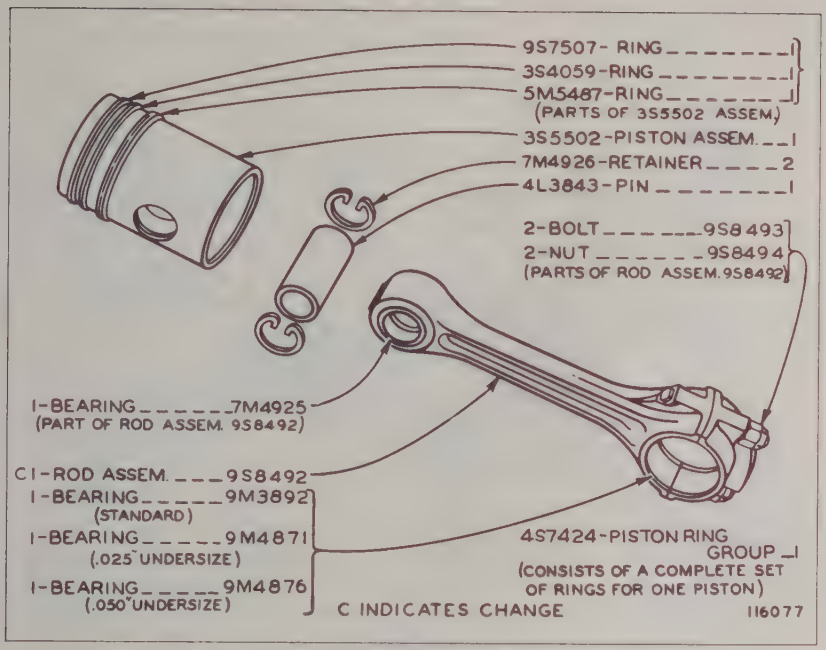
4H9984 CAMSHAFT GROUP



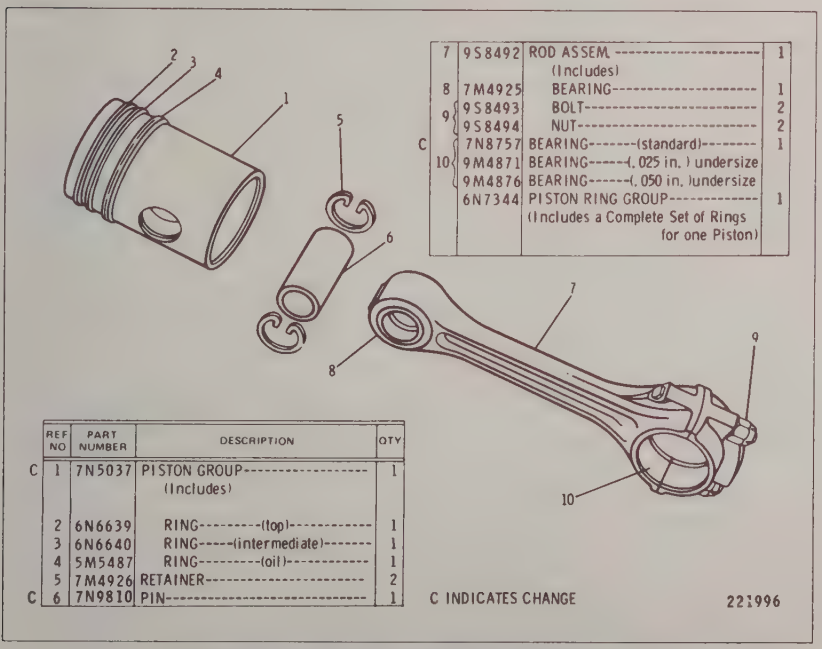
CONNECTING ROD AND PISTON (7M4922 N/S)—6 Required
Serial No. 46B1558 to 46B2436 inclusive. Note: 8S162 Piston and Liner Group, consisting of: 1—Piston Assembly, 1—Liner and 3—Seal, is available



6L4937 ROD AND PISTON GROUP—6 Required
Serial No. 77B1 to 77B219 inclusive. Note: 2S2405 Piston and Liner Group, consisting of: 1—Piston Assembly, 1—Liner and 3—Seal, is available



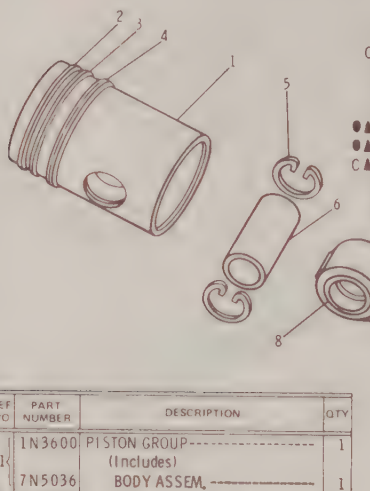
6L4937 ROD AND PISTON GROUP—6 Required
Serial No. 46B2437 to 46B5724 inclusive & 77B220—Up. Note: 2S2405 Piston & Liner Group, consisting of: 1—Piston Assembly, 1—Liner & 3—Seal, is available



	REF NO	PART NUMBER	DESCRIPTION	QTY
C	1	7N5037	PISTON GROUP---------- (Includes)	1
	2	6N6639	RING---------(top)----------	1
	3	6N6640	RING-----(intermediate)-------	1
	4	5M5487	RING---------(oil)----------	1
	5	7M4926	RETAINER----------	2
C	6	7N9810	PIN----------	1

	7	9S8492	ROD ASSEM. ---------- (Includes)	1
	8	7M4925	BEARING----------	1
	9	9S8493	BOLT----------	2
		9S8494	NUT----------	2
C	10	7N8757	BEARING-------(standard)--------	1
		9M4871	BEARING------(.025 in.) undersize	
		9M4876	BEARING------(.050 in.) undersize	
		6N7344	PISTON RING GROUP---------- (Includes a Complete Set of Rings for one Piston)	1

6N6641 ROD AND PISTON GROUP—6 Required
Serial No. 46B5725 to 46B8319 inclusive



	REF NO	PART NUMBER	DESCRIPTION	QTY
C	1	1N3600	PISTON GROUP	1
			(Includes)	
		7N5036	BODY ASSEM.	1
	2	1N3592	RING—(top)	1
	3	6N6640	RING—(intermediate)	1
	4	5M5487	RING—(oil)	1
	5	7M4926	RETAINER	2
	6	7N9810	PIN	1
	7	9S8492	ROD ASSEM. (Includes)	1
C	8	8N2775	BEARING	1
	9	9S8493	BOLT	2
		9S8494	NUT	2
	10	7N8757	BEARING—(standard)	1
●▲		9M4871	BEARING—.635 mm (.025 in.)	
●▲		9M4876	BEARING—1.27 mm (.050 in.)	
C▲		1N3601	PISTON RING GROUP (Includes a Complete Set of Rings for one Piston)	1

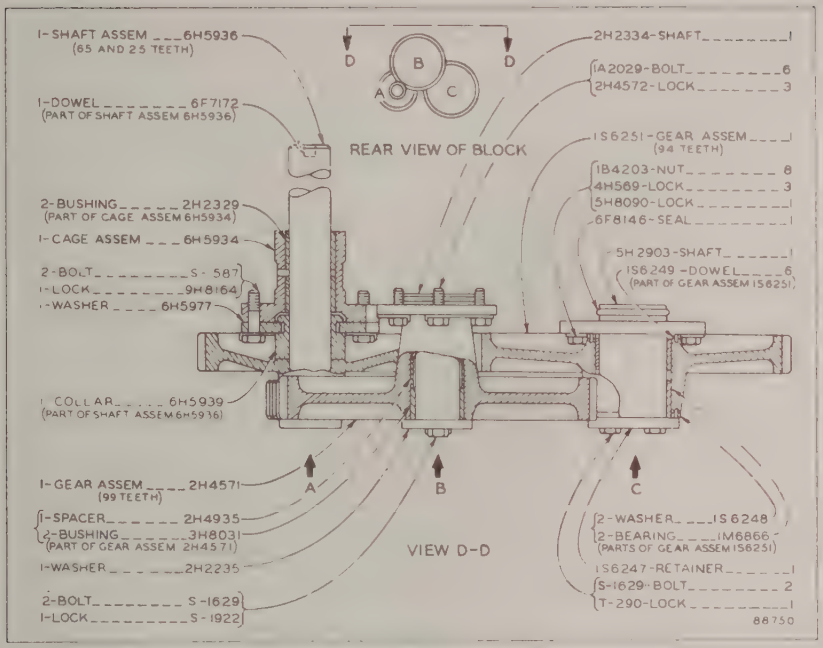
▲ NOT PART OF 6N6641 ROD & PISTON GROUP
● UNDERSIZE

C		SMHS7198	FORM (Installing Piston Group)	1

C INDICATES CHANGE

177054

6N6641 ROD AND PISTON GROUP—6 Required
Serial No. 46B8320—Up

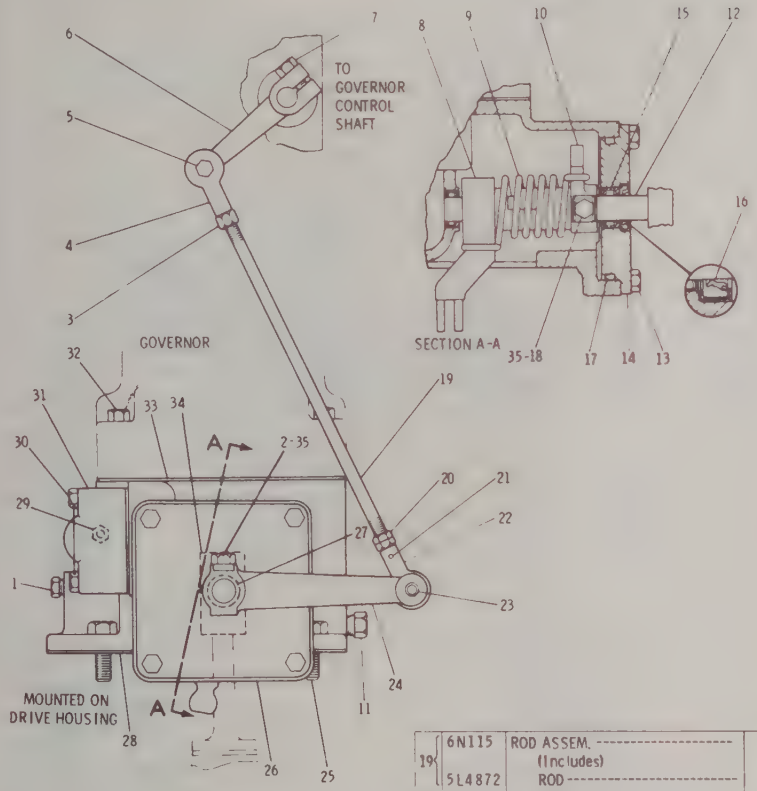


6H6580 CAMSHAFT AND POWER TAKE-OFF IDLER GEAR GROUP

CONSISTS OF:

2	4F2551	SPACER--.017" THICK
1	4F2552	SPRING--.072" THICK

5L8039 TORQUE SPRING GROUP

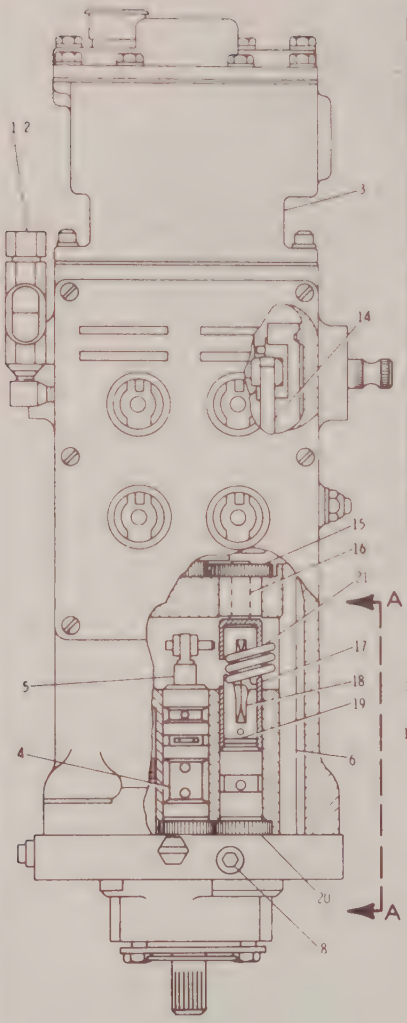


REF NO	PART NUMBER	DESCRIPTION	QTY
1	5M6214	PLUG	1
2	1A2343	BOLT	1
3	4F2294	NUT	1
4	7L4186	ROD END	1
5	S1616	BOLT	1
	4L6458	NUT	1
6	1F3923	LEVER	1
7	S1618	BOLT	1
8	6N105	LEVER	1
9	6N8134	SPRING	1
10	6N102	LEVER	1
11	5M6213	PLUG	1
12	6N100	SHAFT	1
13	S1617	BOLT	4
14	6N400	COVER ASSEM. (Includes)	1
15	4J3044	BEARING	1
16	8H9180	SEAL	1
17	2H6184	SEAL	1
18	4B9883	BOLT	1

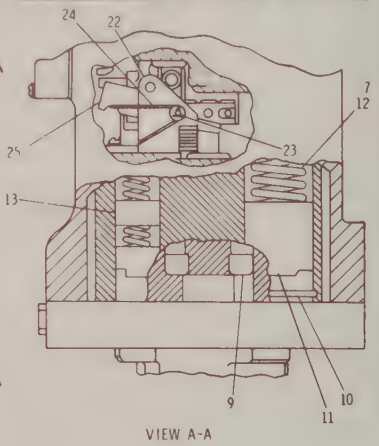
19	6N115	ROD ASSEM. (Includes)	1
	5L4872	ROD	1
20	4F2294	NUT	1
21	7H3639	PIN	1
22	5P6672	ROD END	1
23	2B2695	BOLT	1
24	8L5258	LEVER	1
25	S1594	BOLT	6
26	6N110	HOUSING ASSEM. (Includes)	1
	7H3639	PIN	1
27	4J3044	BEARING	1
28	4N5196	GASKET	1
29	8L5959	SCREW	1
	2L1331	NUT	1
	2L1333	LOCK	1
30	6L1756	BOLT	2
31	1N7190	COVER	1
	6L3458	GASKET	1
32	L2070	BOLT	4
33	6L3401	GASKET	1
34	6N159	COUPLING	1
35	5M7877	LOCK	2

221835

7N4199 WOODWARD GOVERNOR DRIVE GROUP
Serial No. 46B6559—Up



6	8N5069	CONTROLET ASSEM. (Includes)	1
	8N5122	CONTROLET ASSEM. (Includes)	1
7	9F9635	WASHER	2
8	9F2247	PLUG	4
9	2F6707	VALVE ASSEM.	2
10	9F9630	RING	4
11	2F6818	PISTON	2
12	2V6802	SPRING	2
13	3L6746	SEAT	2
14	8N5121	PISTON ASSEM.	1
15	9F9597	GEAR--------(17 teeth)--------	1
16	9F9596	DRIVE ASSEM. (Includes)	1
	9F9599	DRIVE ASSEM.	1
17	6L5602	SLEEVE ASSEM.	1
18	2F6700	LAMINATION	12
19	3K4897	PIN	1
20	9F9598	GEAR ASSEM. --(15 teeth)--	1
21	8N5120	SPRING	1
22	5H6500	LEVER ASSEM. (Includes)	1
	2N1922	PIN	1
23	2F6713	COTTER PIN	1
	4F2317	WASHER	1
24	7L8458	SPRING	1
25	5H6503	LEVER	1



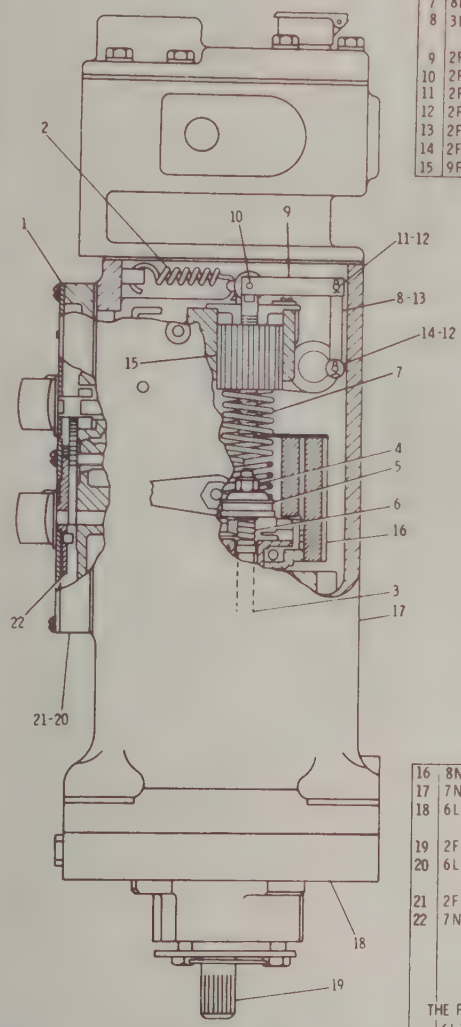
VIEW A-A

REF NO	PART NUMBER	DESCRIPTION	QTY
1	7N8444	GAUGE---------(oil level)---------	1
2	3L2402	FITTING	1
3	7N8325	COVER ASSEM.	1
4	9F9626	BUSHING	1
5	2F6814	PLUNGER	1

		THE FOLLOWING REPAIR KIT IS AVAILABLE:	
	8N4904	KIT-----(PC Board Conversion)---	1

221841

7N9923 WOODWARD GOVERNOR GROUP—UG8D—Part 1
Serial No. 46B7774—Up

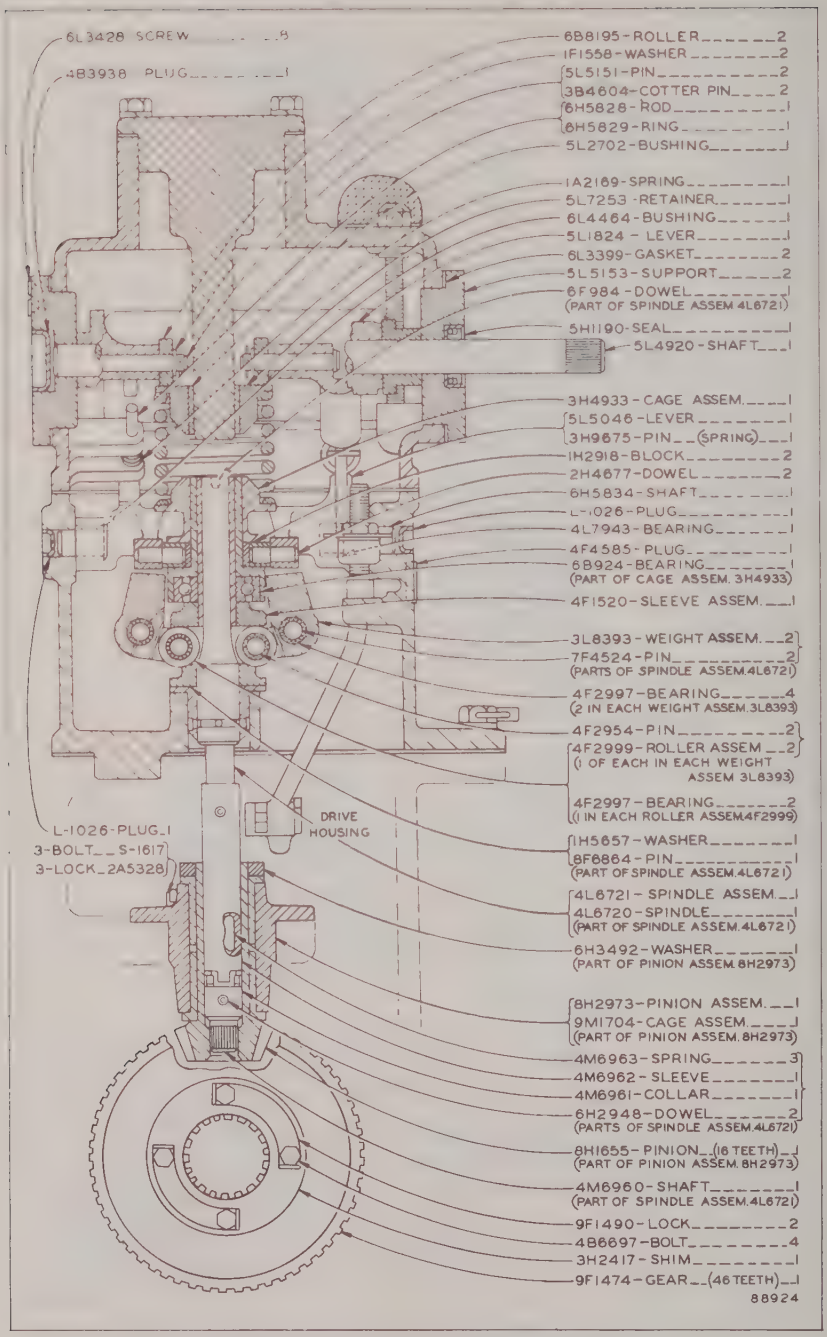


REF. NO.	PART NUMBER	DESCRIPTION	QTY
1	3L6778	PLATE	1
2	2F6761	SPRING	1
3	5H6475	ROD ASSEM. (Includes)	1
	5H6476	ROD & PIN ASSEM.	1
4	7N7578	LOCKNUT	1
5	2F6686	BEARING	1
6	2F6689	SPRING	1
7	8N5119	SPRING ASSEM.	1
8	3L7235	SCREW ASSEM. (Includes)	1
9	2F6693	LEVER	1
10	2F6691	PIN	1
11	2F6763	PIN	1
12	2F6713	COTTER	3
13	2F6738	LINK	1
14	2F6746	WASHER	1
15	9F9706	GEAR	1
16	8N5123	BALLHEAD ASSEM.	1
17	7N6287	CASE ASSEM.	1
18	6L4249	BASE ASSEM. (Includes)	1
19	2F6674	SHAFT	1
20	6L4252	PANEL ASSEM. (Includes)	1
21	2F6766	GEAR ASSEM.	1
22	7N9119	GEAR ASSEM.	1

THE FOLLOWING REPAIR KITS ARE AVAILABLE:

6L3629	KIT-(hardware) (Includes pointers, pins, rings, laminations, washers, nuts, "O" rings, lockwashers, seals cotter pins, lockwire & screws)	1
7N9121	KIT-(gasket)	1
6L4299	KIT-(repair) (Includes valve assemblies, pins, plugs, bearings, springs, studs, cover assembly, pistons, knobs, ring, sets screws, washer and seat)	1

221842



GOVERNOR--PART 1

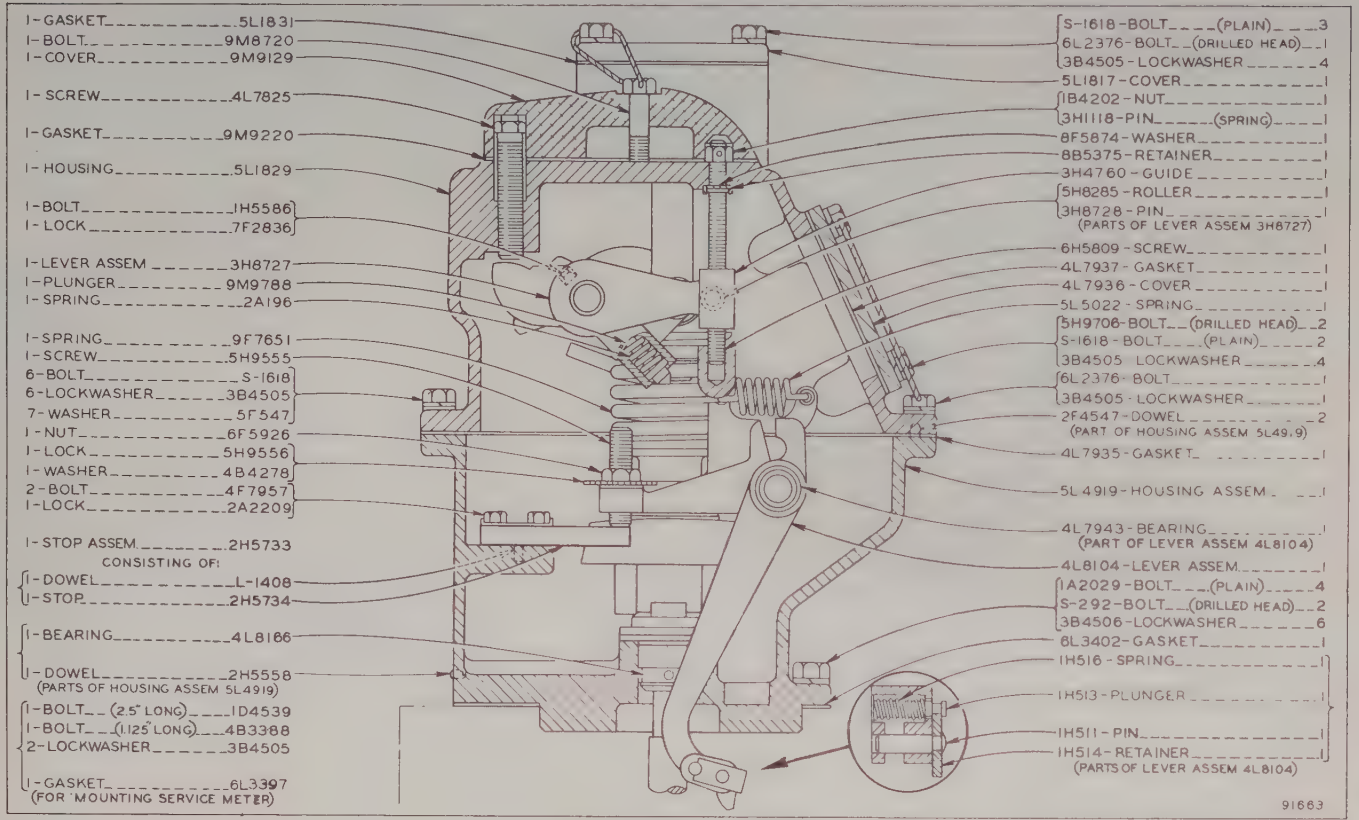
SERIAL NO. 46B1558 TO 46B2347 AND 77B1 TO 77B268 INCLUSIVE

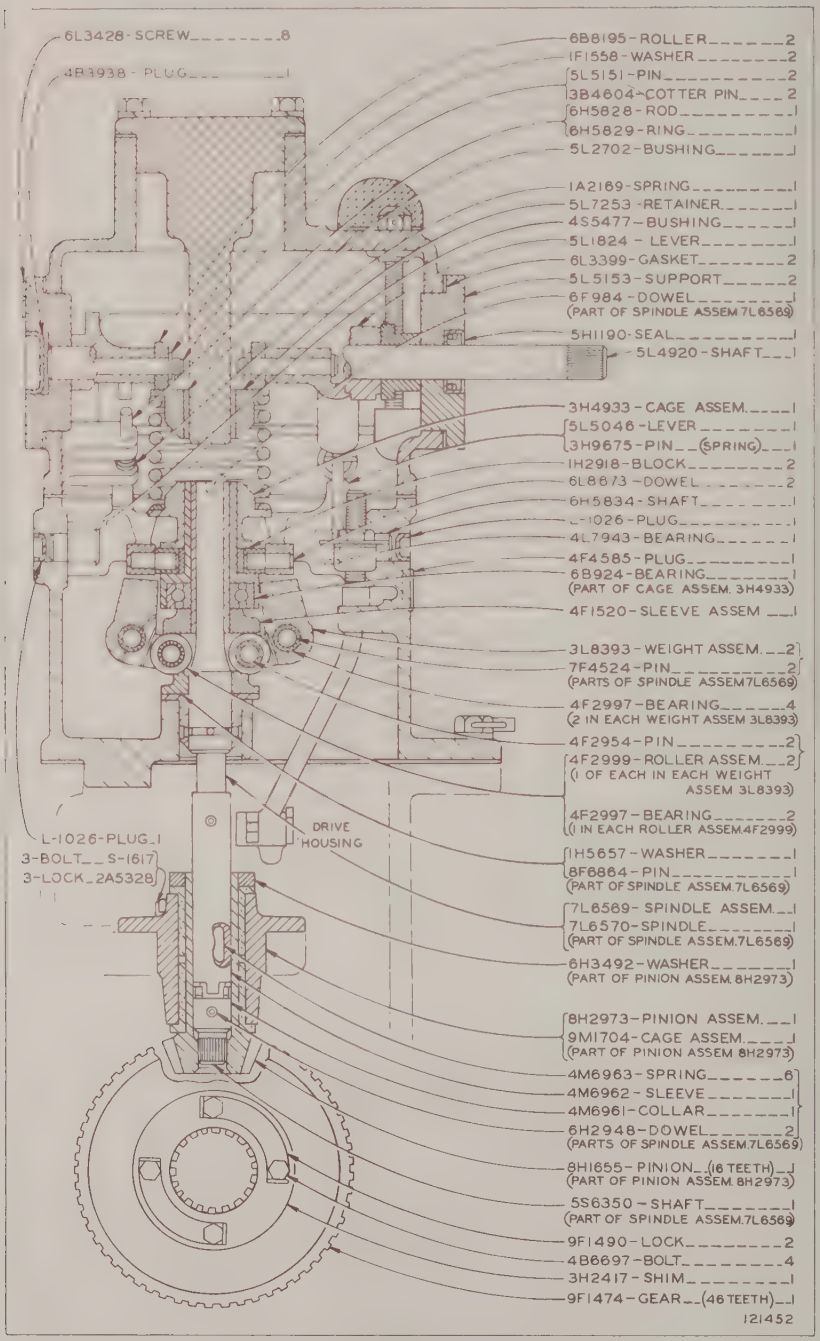
REFER ALSO TO PAGES 126 AND 130 FOR SPECIAL PARTS

GOVERNOR--PART 2

SERIAL No. 46B1558 TO 46B2347 AND 77B1 TO 77B268 INCLUSIVE

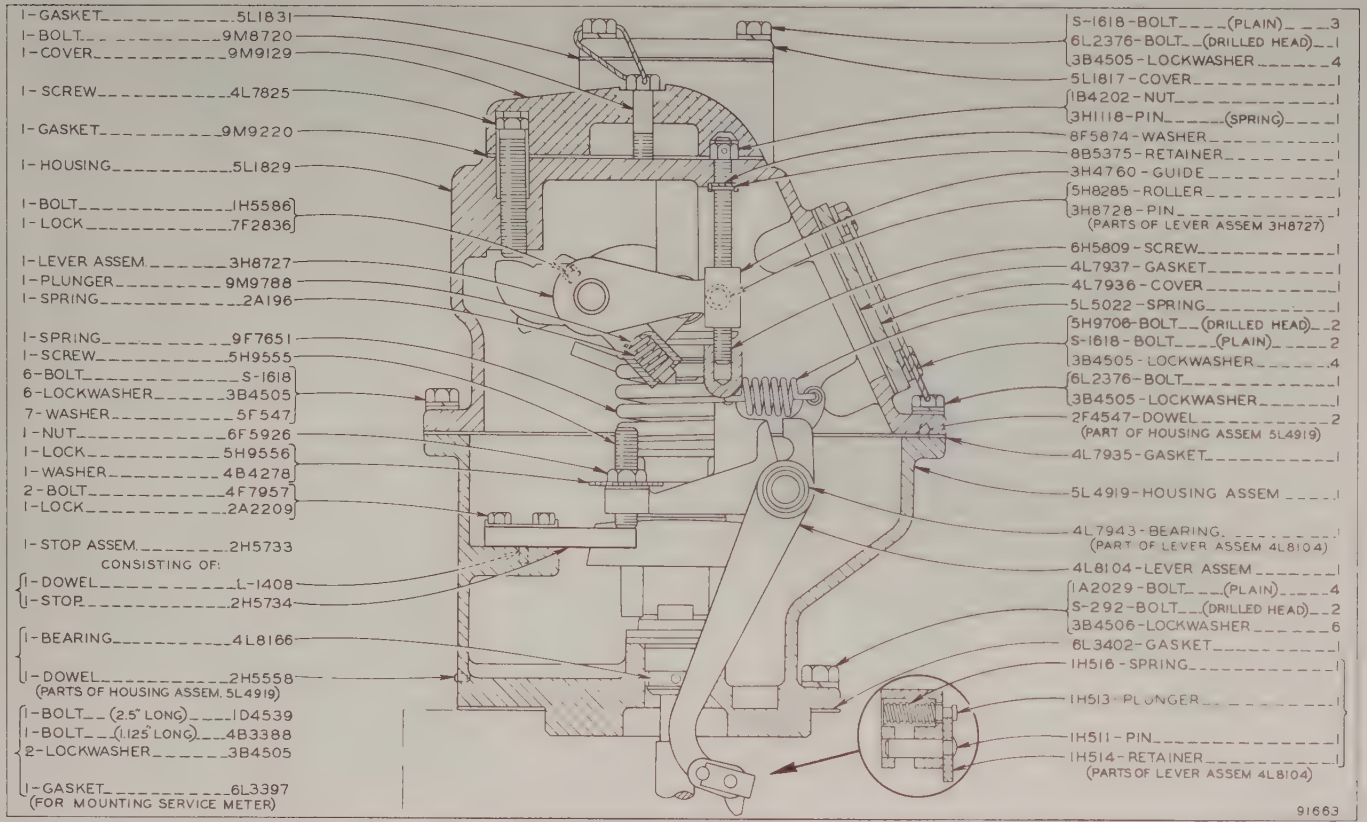
REFER ALSO TO PAGES 126 AND 130 FOR SPECIAL PARTS

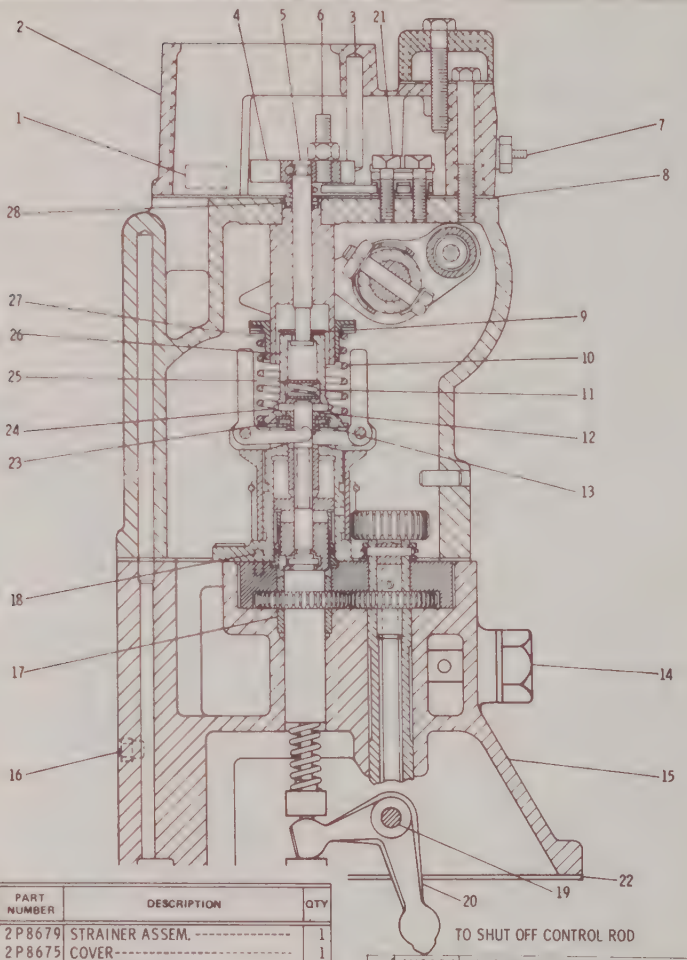




5L4917 GOVERNOR GROUP—Part 1
Serial No. 46B2348 to 46B5064 inclusive
Refer also to Pages 126 and 130 for special parts

5L4917 GOVERNOR GROUP—Part 2
Serial No. 46B2348 to 46B5064 inclusive
Refer also to Pages 126 and 130 for special parts

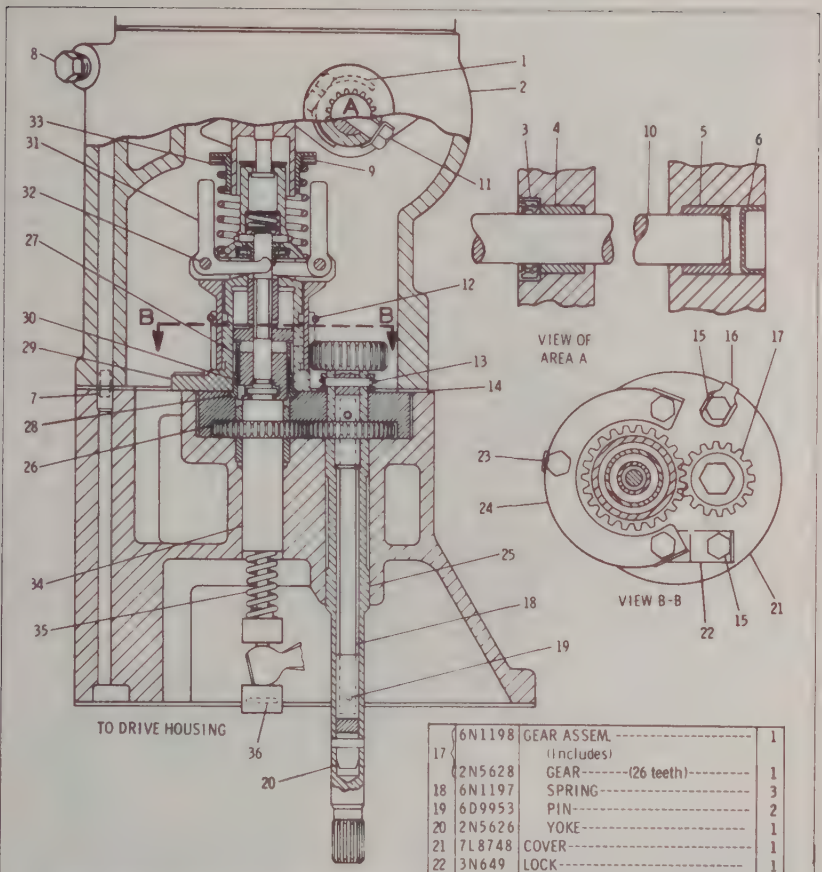




REF NO	PART NUMBER	DESCRIPTION	QTY
1	2P8679	STRAINER ASSEM.	1
2	2P8675	COVER	1
		(Includes)	
3	2S7316	DOWEL	1
4	8L4154	COLLAR	1
5	8M8739	BOLT	1
6	8L4155	SCREW	1
	5S9607	NUT	1
7	3P9	INSULATOR	1
8	2P8697	GASKET	1
9	8H9181	SPRING-(bumper)	1
10	4N6681	SPRING-(outer)	1
11	9M6303	SPRING-(inner)	1
12	2S7	SLEEVE	1
	3K810	RING	1
13	7M7193	RACE	2
14	7L8771	VALVE ASSEM.	1
		(Includes)	
	7L8696	SPRING	1
	3B1925	GASKET	1
15	4N3154	HOUSING ASSEM.	1
		(Includes)	
	9F2247	PLUG	1
16	2S7905	PLUG	2
17	7L8782	BEARING	1
18	4F3492	DOWEL	2
19	4N5112	SHAFT	1
	8F9206	SEAL	1
20	4N2673	LEVER	1
▲ 21	Not Serv	RACK STOP	1
22	4N5196	GASKET	1
23	7M7219	BEARING	1
24	8M8726	DOWEL	1
	8M8993	RING	1
25	9M6302	WASHER	2
26	2S8	SEAT	1
27	6N3504	SEAT	1
28	9L6422	SPRING	1

▲ SEPARATE ILLUSTRATION 153076

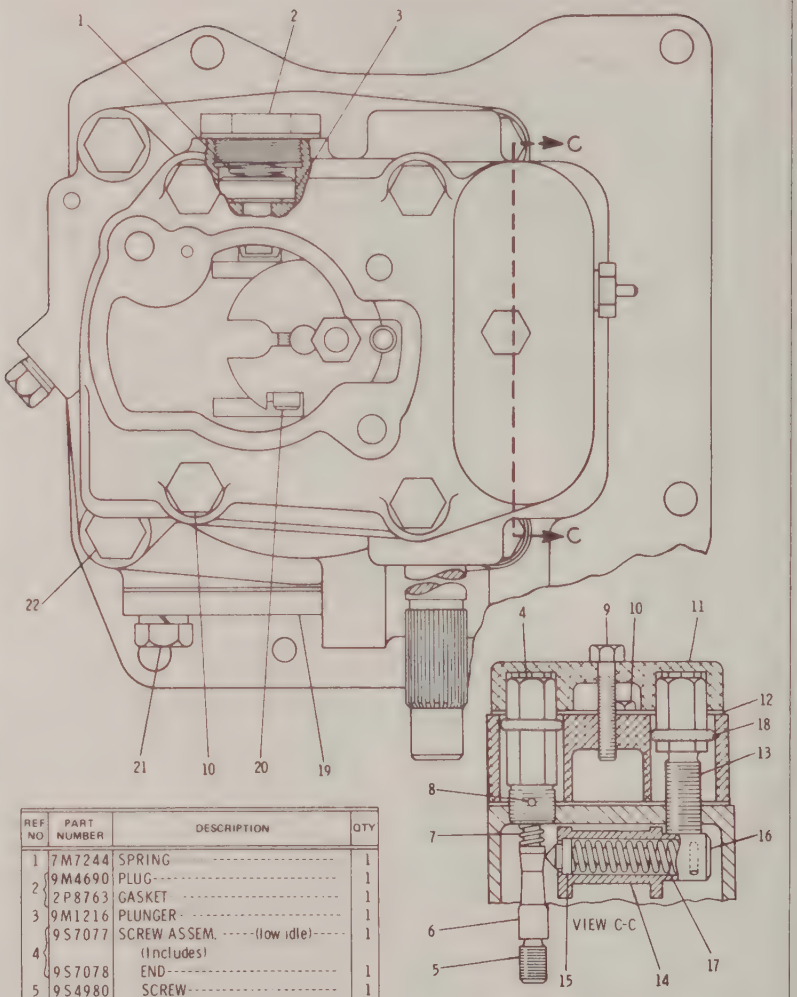
4N9845 GOVERNOR GROUP—Part 1 of 3
Serial No. 46B5065 to 46B5232 inclusive
Rack Stop parts are shown on Page 37H



REF NO	PART NUMBER	DESCRIPTION	QTY
1	9S4673	BAND ASSEM.	1
2	4N9849	HOUSING ASSEM. (Includes)	1
3	9S4671	SEAL	1
4	9S798	BEARING	1
5	8S134	BEARING	1
6	4F4585	PLUG	1
7	9F2083	DOWEL	2
8	4N5050	PLUG	1
9	2P9556	WASHER	1
10	8L8883	SHAFT	1
11	9S4468	BOLT	1
	2F4159	LOCK	1
12	7B8105	RING	1
13	2N5624	RETAINER	1
	8M8726	DOWEL	1
	8M8993	RING	1
14	3S6552	GASKET	1
15	9F6580	BOLT	2
16	7F2836	LOCK	1
17	6N1198	GEAR ASSEM. (Includes)	1
	2N5628	GEAR--(26 teeth)	1
18	6N1197	SPRING	3
19	6D9953	PIN	2
20	2N5626	YOKE	1
21	7L8748	COVER	1
22	3N649	LOCK	1
23	2A5546	BOLT	3
24	9M6293	LOCK	1
25	4N2679	SHAFT ASSEM. (Includes)	1
	3N2712	DOWEL	1
26	2N3221	GEAR--(13 teeth)	1
27	2P8725	PISTON ASSEM. (Includes)	1
	7S8447	PISTON ASSEM.	1
28	7L8777	SLEEVE	1
29	1S4741	CYLINDER	1
30	8M8997	SEAL	1
31	2N478	WEIGHT ASSEM. (Includes)	1
	2N477	WEIGHT	2
32	1S5440	DOWEL	2
33	2N828	WASHER	2
34	7L280	PIN ASSEM. (Includes)	1
	8S7499	PIN	1
35	7L8695	SPRING	1
C 36	7H3639	PIN	2

C INDICATES CHANGE 223129

4N9845 GOVERNOR GROUP—Part 2 of 3
Serial No. 46B5065 to 46B5232 inclusive

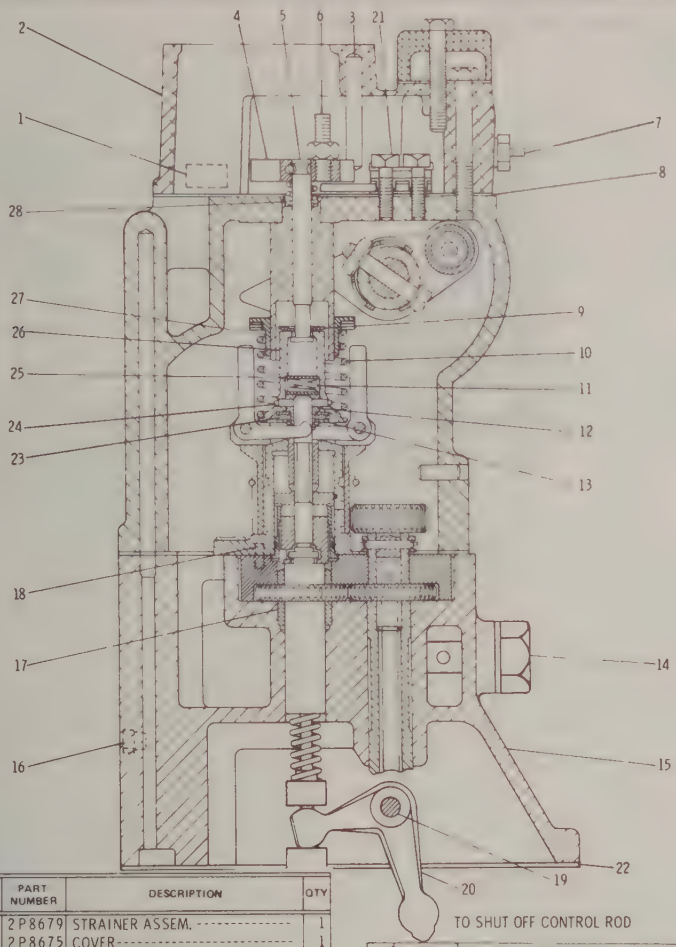


REF NO	PART NUMBER	DESCRIPTION	QTY
1	7M7244	SPRING	1
2	9M4690	PLUG	1
	2P8763	GASKET	1
3	9M1216	PLUNGER	1
4	9S7077	SCREW ASSEM. -----(low idle)----- (Includes)	1
	9S7078	END	1
5	9S4980	SCREW	1
6	9S7052	SLEEVE	1
7	9S4982	SPRING	1
8	4H1641	PIN	1
9	6L1756	BOLT	1
10	2B2694	BOLT	5
11	5L8992	COVER	1
12	5L8991	GASKET	1
13	3S1494	SCREW-------(high idle)-------	1
14	2P8686	LEVER ASSEM. (Includes)	1
	9S4466	LEVER ASSEM.	1
15	9M9788	PLUNGER	1
16	5H1351	PIN	1
17	7M7316	SPRING	1
18	2J157	SEAL	2

19	8L6206	PLATE	1
	8L6207	GASKET	1
20	9M4704	SCREW	1
21	2B2695	BOLT	4
	3B4505	LOCKWASHER	4
22	1A2029	BOLT	6
	3B4506	LOCKWASHER	6

153400

4N9845 GOVERNOR GROUP—Part 3 of 3
Serial No. 46B5065 to 46B5232 inclusive



REF. NO	PART NUMBER	DESCRIPTION	QTY
1	2P8679	STRAINER ASSEM.	1
2	2P8675	COVER	1
		(Includes)	
3	2S7316	DOWEL	1
4	8L4154	COLLAR	1
5	8M8739	BOLT	1
6	8L4155	SCREW	1
	5S9607	NUT	1
7	3P9	INSULATOR	1
8	2P8697	GASKET	1
9	8H9181	SPRING-(bumper)	1
10	4N6681	SPRING-(outer)	1
11	9M6303	SPRING-(inner)	1
12	2S7	SLEEVE	1
	3K810	RING	1
13	7M7193	RACE	2
14	7L8771	VALVE ASSEM.	1
		(Includes)	
	7L8696	SPRING	1
	3B1925	GASKET	1

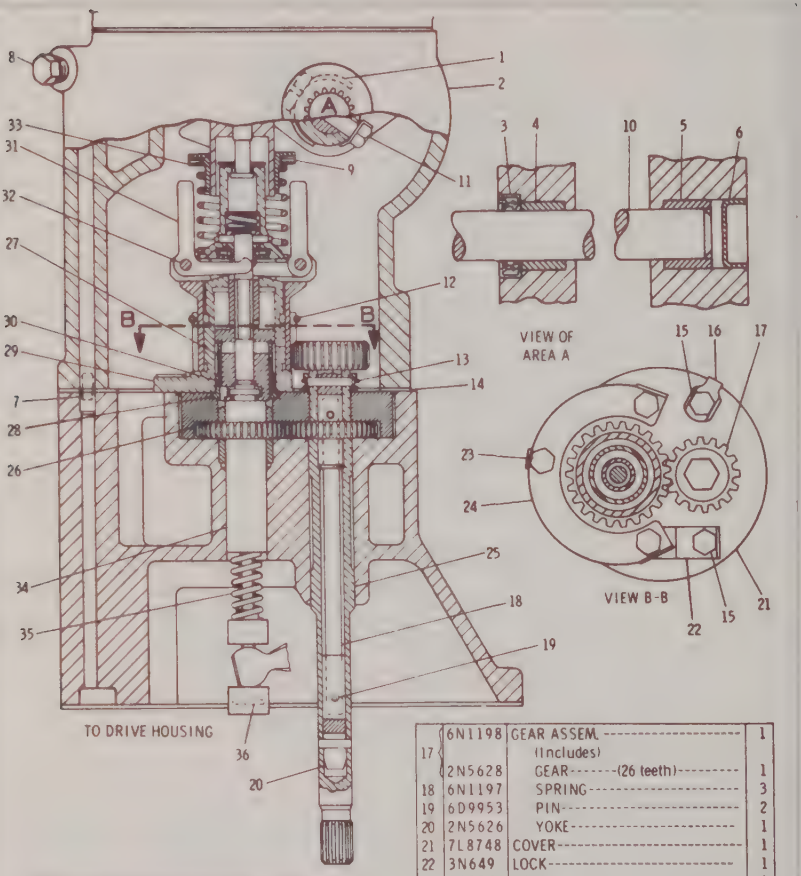
	REF. NO	PART NUMBER	DESCRIPTION	QTY
	15	4N3154	HOUSING ASSEM.	1
			(Includes)	
		9F2247	PLUG	1
	16	2S7905	PLUG	2
	17	7L8782	BEARING	1
	18	4F3492	DOWEL	2
	19	4N5112	SHAFT	1
		8F9206	SEAL	1
	20	4N2673	LEVER	1
C ▲	21	Not Serv	GOVERNOR TORQUE SPRING	1
	22	4N5196	GASKET	1
	23	7M7219	BEARING	1
	24	8M8726	DOWEL	1
		8M8993	RING	1
	25	9M6302	WASHER	2
	26	2S8	SEAT	1
	27	6N3504	SEAT	1
	28	9L6422	SPRING	1

C INDICATES CHANGE

▲ SEPARATE ILLUSTRATION

206145

4N9845 GOVERNOR GROUP—Part 1 of 3
Serial No. 46B5233 to 46B5742 inclusive
4N4267 Governor Torque Spring parts are shown on Page 37H

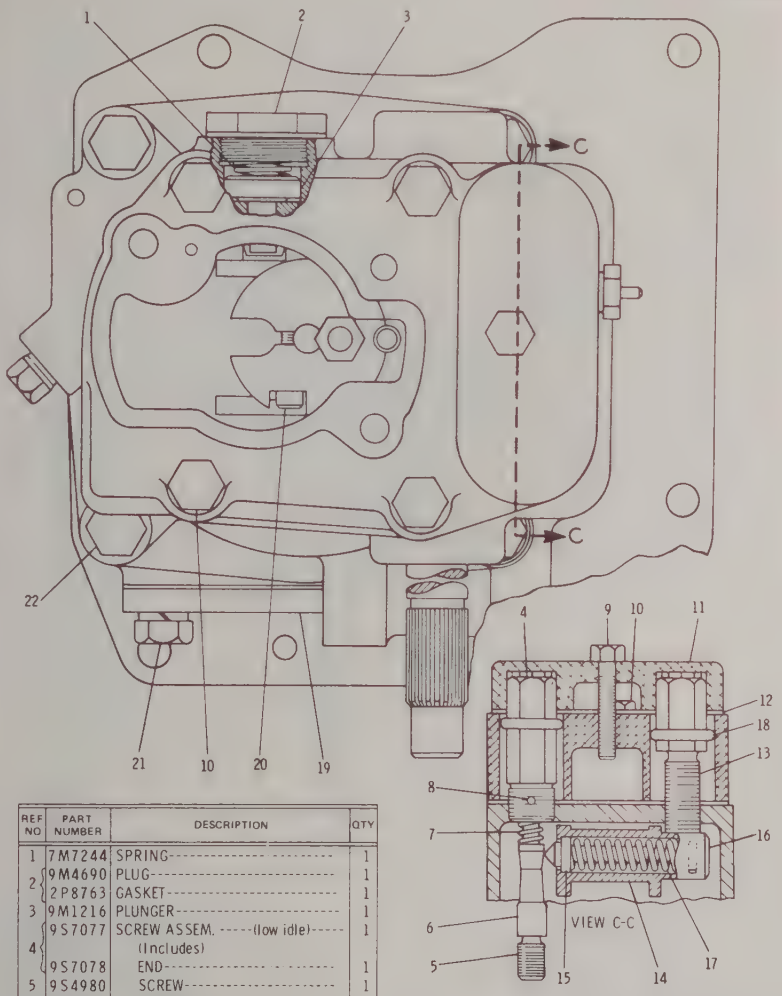


REF. NO	PART NUMBER	DESCRIPTION	QTY
1	9S4673	BAND ASSEM.	1
2	4N9849	HOUSING ASSEM. (Includes)	1
3	9S4671	SEAL	1
4	9S798	BEARING	1
5	8S134	BEARING	1
6	4F4585	PLUG	1
7	9F2083	DOWEL	2
8	4N5050	PLUG	1
9	2P9556	WASHER	1
10	8L8883	SHAFT	1
11	9S4468	BOLT	1
	2F4159	LOCK	1
12	7B8105	RING	1
13	2N5624	RETAINER	1
	8M8726	DOWEL	1
	8M8993	RING	1
14	3S6552	GASKET	1
15	9F6580	BOLT	2
16	7F2836	LOCK	1
17	6N1198	GEAR ASSEM. (Includes)	1
	2N5628	GEAR-(26 teeth)	1
18	6N1197	SPRING	3
19	6D9953	PIN	2
20	2N5626	YOKE	1
21	7L8748	COVER	1
22	3N649	LOCK	1
23	2A5546	BOLT	3
24	9M6293	LOCK	1
25	4N2679	SHAFT ASSEM. (Includes)	1
	3N2712	DOWEL	1
26	2N3221	GEAR-(13 teeth)	1
27	2P8725	PISTON ASSEM. (Includes)	1
	7S8447	PISTON ASSEM.	1
28	7L8777	SLEEVE	1
29	1S4741	CYLINDER	1
30	8M8997	SEAL	1
31	2N478	WEIGHT ASSEM. (Includes)	1
	2N477	WEIGHT	2
32	1S5440	DOWEL	2
33	2N828	WASHER	2
34	7L280	PIN ASSEM. (Includes)	1
	8S7499	PIN	1
35	7L8695	SPRING	1
C 36	7H3639	PIN	2

C INDICATES CHANGE

223129

4N9845 GOVERNOR GROUP—Part 2 of 3
Serial No. 46B5233 to 46B5742 inclusive

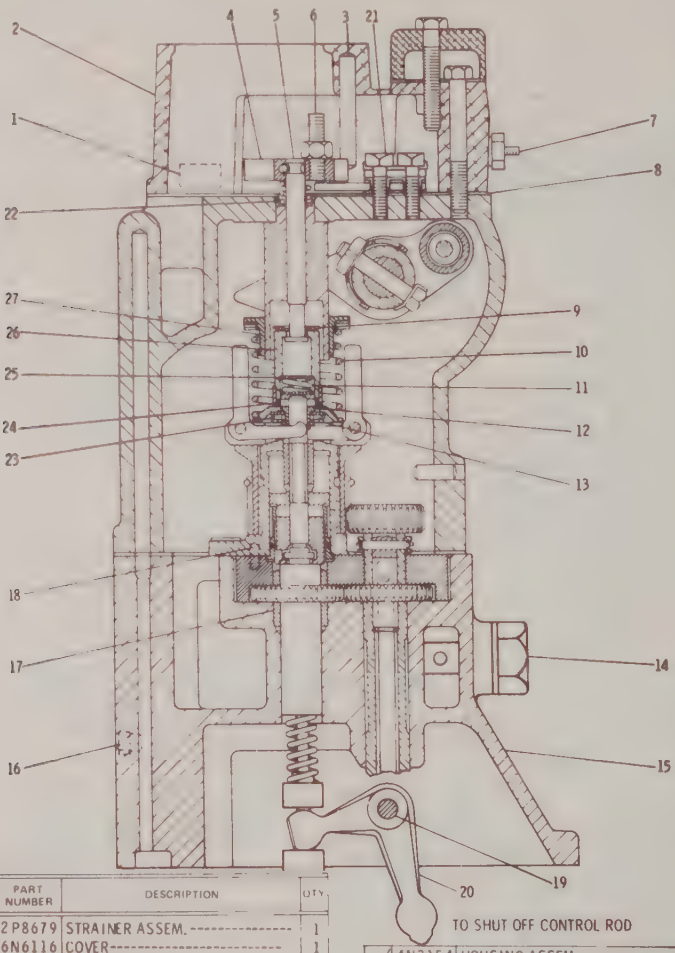


REF NO	PART NUMBER	DESCRIPTION	QTY
1	7M7244	SPRING	1
2	9M4690	PLUG	1
	2P8763	GASKET	1
3	9M1216	PLUNGER	1
4	9S7077	SCREW ASSEM. -----(low idle)----- (Includes)	1
	9S7078	END	1
5	9S4980	SCREW	1
6	9S7052	SLEEVE	1
7	9S4982	SPRING	1
8	4H1641	PIN	1
9	6L1756	BOLT	1
10	2B2694	BOLT	5
11	5L8992	COVER	1
12	5L8991	GASKET	1
13	3S1494	SCREW-------(high idle)---------	1
14	2P8686	LEVER ASSEM. (Includes)	1
	9S4466	LEVER ASSEM.	1
15	9M9788	PLUNGER	1
16	5H1351	PIN	1
17	7M7316	SPRING	1
18	2J157	SEAL	2

19	8L6206	PLATE	1
	8L6207	GASKET	1
20	9M4704	SCREW	1
21	2B2695	BOLT	4
	3B4505	LOCKWASHER	4
22	1A2029	BOLT	6
	3B4506	LOCKWASHER	6

153400

4N9845 GOVERNOR GROUP—Part 3 of 3
Serial No. 46B5233 to 46B5742 inclusive



	REF NO	PART NUMBER	DESCRIPTION	QTY
C	1	2P8679	STRAINER ASSEM.	1
C	2	6N6116	COVER (Includes)	1
	3	2S7316	DOWEL	1
	4	8L4154	COLLAR	1
	5	8M8739	BOLT	1
	6	8L4155	SCREW	1
C		1B4201	NUT	1
	7	3P9	INSULATOR	1
	8	2P8697	GASKET	1
	9	8H9181	SPRING-(bumper)	1
	10	4N6681	SPRING-(outer)	1
	11	9M6303	SPRING-(inner)	1
	12	2S7	SLEEVE	1
		3K810	RING	1
	13	7M7193	RACE	2
	14	7L8771	VALVE ASSEM. (Includes)	1
		7L8696	SPRING	1
C		4N7465	GASKET	1

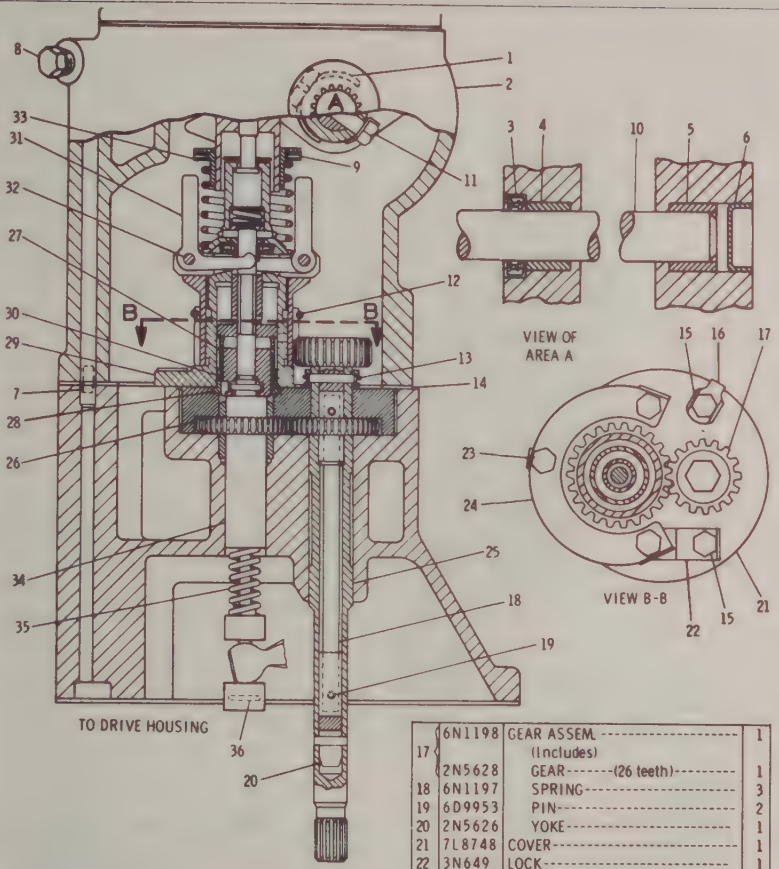
	REF NO	PART NUMBER	DESCRIPTION	QTY
	15	4N3154	HOUSING ASSEM. (Includes)	1
		9F2247	PLUG	1
	16	2S7905	PLUG	2
	17	7L8782	BEARING	1
	18	4F3492	DOWEL	2
	19	4N5112	SHAFT	1
		8F9206	SEAL	1
	20	4N2673	LEVER	1
C▲	21	4N4267	GOVERNOR TORQUE SPRING	1
	22	9L6422	SPRING	1
	23	7M7219	BEARING	1
C	24	2P8630	DOWEL	1
C		4N3887	RING	1
	25	9M6302	WASHER	2
C	26	6N8629	SEAT	1
	27	6N3504	SEAT	1

C INDICATES CHANGE

▲ SEPARATE ILLUSTRATION

221367

4N9845 GOVERNOR GROUP—Part 1 of 3
Serial No. 46B5743—Up
4N4267 Governor Torque Spring parts are shown on Page 37H

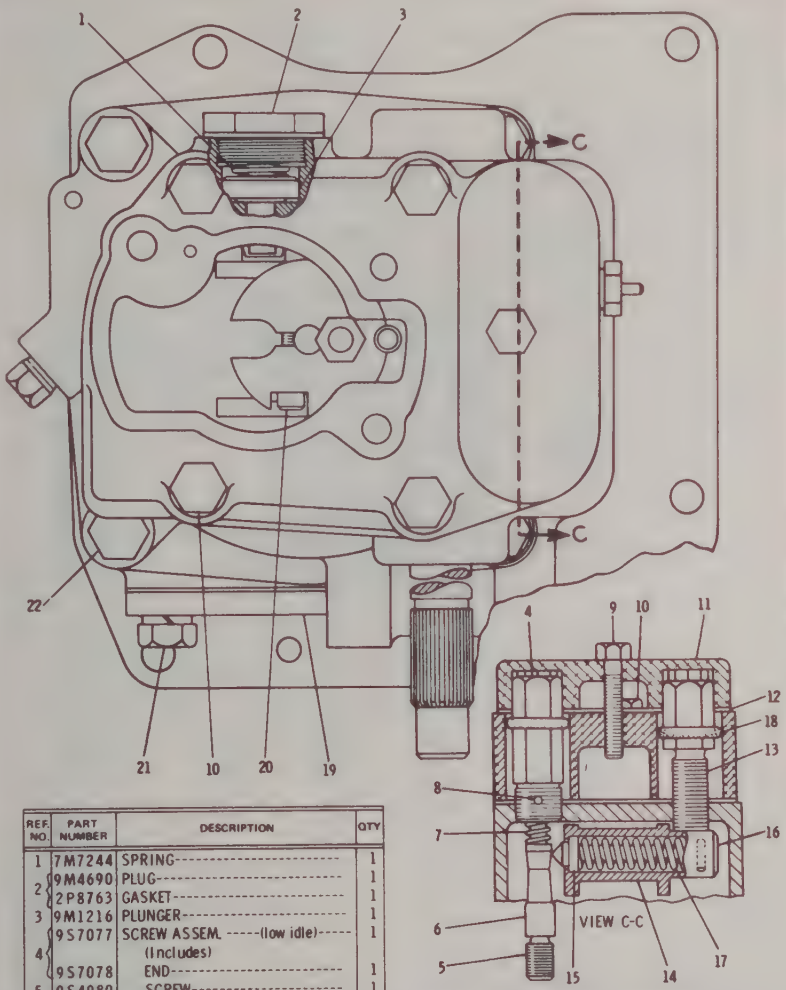


REF. NO.	PART NUMBER	DESCRIPTION	QTY
1	9S4673	BAND ASSEM.	1
2	4N9849	HOUSING ASSEM. (Includes)	1
3	9S4671	SEAL	1
4	9S798	BEARING	1
5	8S134	BEARING	1
6	4F4585	PLUG	1
7	9F2083	DOWEL	2
8	4N5050	PLUG	1
9	2P9556	WASHER	1
10	8L8883	SHAFT	1
11	9S4468	BOLT	1
	2F4159	LOCK	1
12	7B8105	RING	1
13	2N5624	RETAINER	1
	8M8726	DOWEL	1
	8M8993	RING	1
14	3S6552	GASKET	1
15	9F6580	BOLT	2
16	7F2836	LOCK	1
17	6N1198	GEAR ASSEM. (Includes)	1
	2N5628	GEAR-------(26 teeth)	1
18	6N1197	SPRING	3
19	6D9953	PIN	2
20	2N5626	YOKE	1
21	7L8748	COVER	1
22	3N649	LOCK	1
23	2A5546	BOLT	3
24	9M6293	LOCK	1
25	4N2679	SHAFT ASSEM. (Includes)	1
	3N2712	DOWEL	1
26	2N3221	GEAR---------(13 teeth)	1
27	2P8725	PISTON ASSEM. (Includes)	1
	7S8447	PISTON ASSEM.	1
28	7L8777	SLEEVE	1
29	1S4741	CYLINDER	1
C 30	5P9757	SEAL	1
31	2N478	WEIGHT ASSEM. (Includes)	1
	2N477	WEIGHT	2
32	1S5440	DOWEL	2
33	2N828	WASHER	2
34	7L280	PIN ASSEM. (Includes)	1
	8S7499	PIN	1
35	7L8695	SPRING	1
C 36	7H3639	PIN	2

C INDICATES CHANGE

225530

4N9845 GOVERNOR GROUP—Part 2 of 3
Serial No. 46B5743—Up



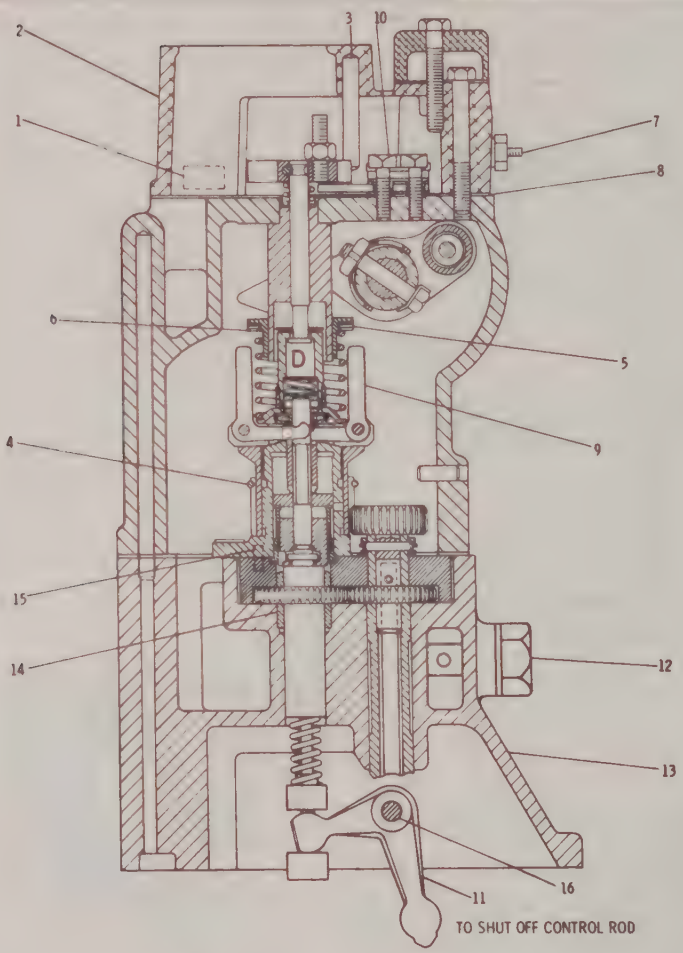
REF. NO.	PART NUMBER	DESCRIPTION	QTY
1	7M7244	SPRING	1
2	9M4690	PLUG	1
	2P8763	GASKET	1
3	9M1216	PLUNGER	1
4	9S7077	SCREW ASSEM. -(low idle)- (Includes)	1
	9S7078	END	1
5	9S4980	SCREW	1
6	9S7052	SLEEVE	1
7	9S4982	SPRING	1
8	4H1641	PIN	1
9	6L1756	BOLT	1
10	2B2694	BOLT	5
11	5L8992	COVER	1
12	5L8991	GASKET	1
C 13	8S8952	SCREW -(high idle)-	1
14	2P8686	LEVER ASSEM. (Includes)	1
	9S4466	LEVER ASSEM.	1
15	9M9788	PLUGER	1
16	5H1351	PIN	1
17	7M7316	SPRING	1
18	2J157	SEAL	2

19	8L6206	PLATE	1
	8L6207	GASKET	1
20	9M4704	SCREW	1
C 21	S1617	BOLT	4
	3B4505	LOCKWASHER	4
22	1A2029	BOLT	6
	3B4506	LOCKWASHER	6

C INDICATES CHANGE

160525

4N9845 GOVERNOR GROUP—Part 3 of 3
Serial No. 46B5743—Up

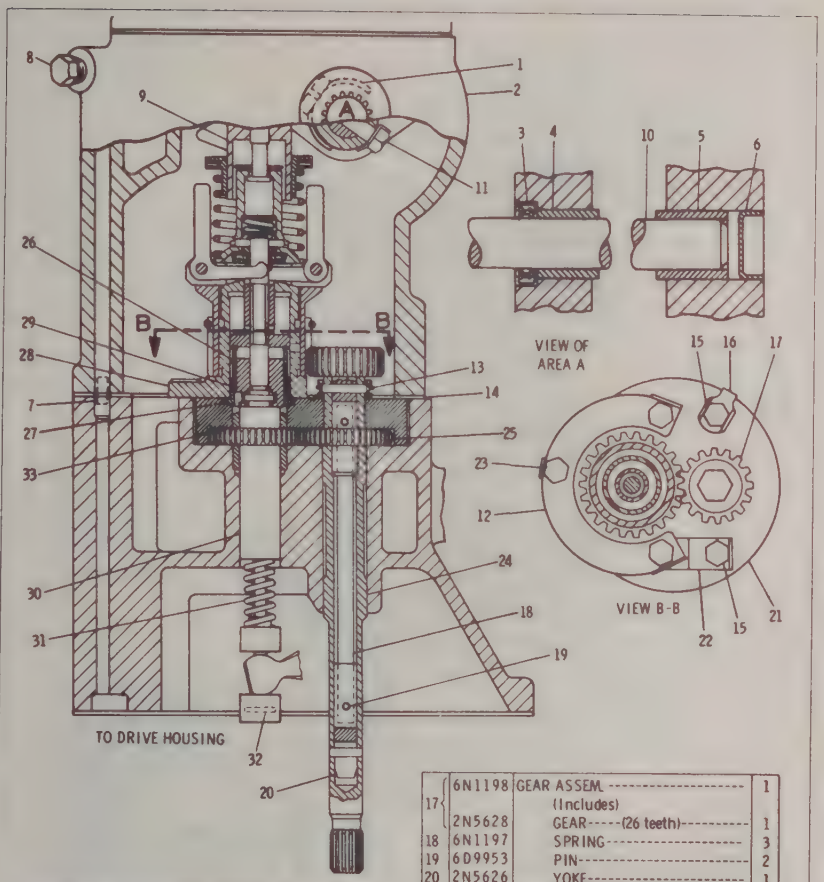


REF. NO.	PART NUMBER	DESCRIPTION	QTY.
1	2P8679	STRAINER ASSEM.	1
2	6N6116	COVER	1
		(Includes)	
3	2S7316	DOWEL	1
4	7B8105	RING	1
5	2P9556	WASHER	1
6	2N828	WASHER-----(wave)	2
7	3P9	INSULATOR	1
8	2P8697	GASKET	1
9	2N478	WEIGHT ASSEM.	1
10	4N4267	GOVERNOR TORQUE SPRING	1
		(Separate Illustration)	
11	4N2673	LEVER	1

REF. NO.	PART NUMBER	DESCRIPTION	QTY.
12	7L8771	VALVE ASSEM.	1
		(Includes)	
	7L8696	SPRING	1
	4N7465	GASKET	1
13	4N3154	HOUSING ASSEM.	1
		(Includes)	
	2D6642	BALL	2
	9F2247	PLUG	1
14	7L8782	BEARING	1
15	4F3492	DOWEL	2
16	4N5112	SHAFT	1
	8F9206	SEAL	1

225531

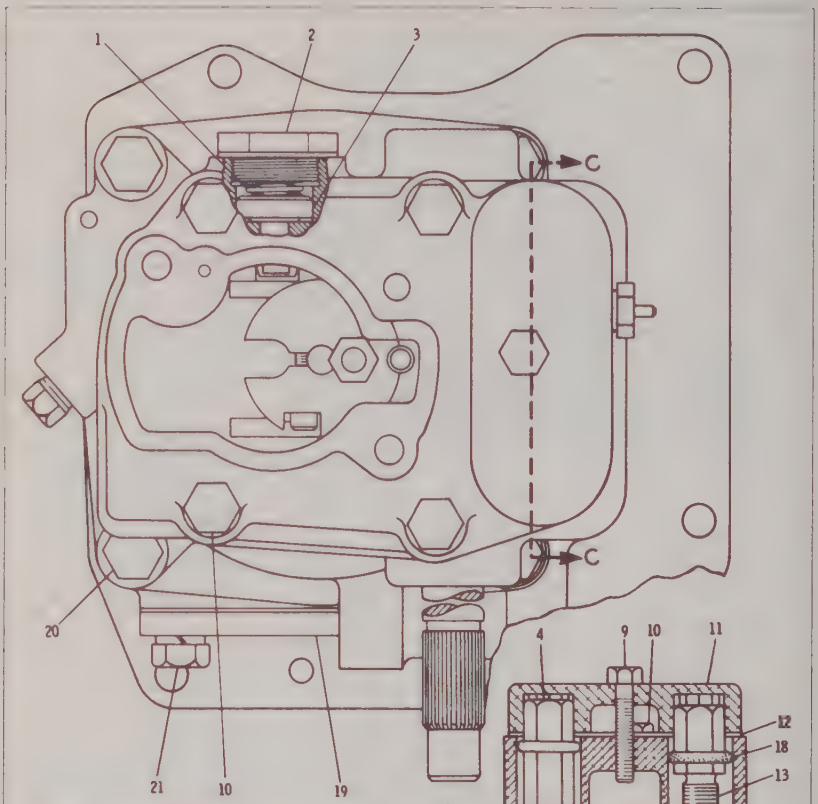
8N4859 GOVERNOR GROUP—Part 1 of 4
Serial No. 46B8125—Up
4N4267 Governor Torque Spring parts are shown on Page 37H



REF. NO.	PART NUMBER	DESCRIPTION	QTY.
1	9S4673	BAND ASSEM.	1
2	4N9849	HOUSING ASSEM. (Includes)	1
3	9S4671	SEAL	1
4	9S798	BEARING	1
5	8S134	BEARING	1
6	4F4585	PLUG	1
7	9F2083	DOWEL	2
8	4N5050	PLUG	1
9	8M8403	GUIDE	1
10	8L8883	SHAFT	1
11	9S4468	BOLT	1
	2F4159	LOCK	1
12	9M6293	LOCK	1
13	2N5624	RETAINER	1
	8M8726	DOWEL	1
	8M8993	RING	1
14	3S6552	GASKET	1
15	9F6580	BOLT	2
16	7F2836	LOCK	1
17	6N1198	GEAR ASSEM. (Includes)	1
	2N5628	GEAR-(26 teeth)	1
18	6N1197	SPRING	3
19	6D9953	PIN	2
20	2N5626	YOKE	1
21	7L8748	COVER	1
22	3N649	LOCK	1
23	2A5546	BOLT	3
24	8N4766	SHAFT ASSEM. (Includes)	1
	3N2712	DOWEL	1
25	2N3220	GEAR-(13 teeth)	1
26	2P8725	PISTON ASSEM. (Includes)	1
	7S8447	PISTON ASSEM.	1
27	8N4385	SLEEVE	1
28	1S4741	CYLINDER	1
29	5P9757	SEAL	1
30	7L280	PIN ASSEM. (Includes)	1
	8S7499	PIN	1
31	7L8695	SPRING	1
32	7H3639	PIN	2
33	2N3221	GEAR-(13 teeth)	1

225532

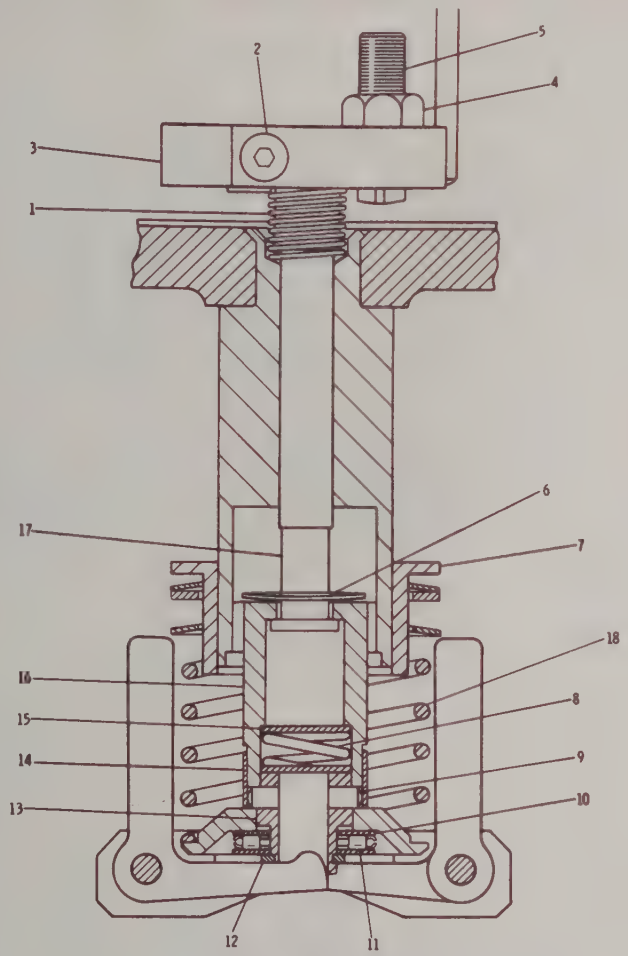
8N4859 GOVERNOR GROUP—Part 2 of 4
Serial No. 46B8125—Up



REF NO	PART NUMBER	DESCRIPTION	QTY.
1	7M7244	SPRING	1
2	9M4690	PLUG	1
	2P8763	GASKET	1
3	9M1216	PLUNGER	1
4	9S7077	SCREW ASSEM. ------(low idle)---- (Includes)	1
	9S7078	END	1
5	9S4980	SCREW	1
6	9S7052	SLEEVE	1
7	9S4982	SPRING	1
8	4H1641	PIN	1
9	6L1756	BOLT	1
10	2B2694	BOLT	5
11	5L8992	COVER	1
12	5L8991	GASKET	1
13	8S8952	SCREW---------(high idle)--------	1
14	2P8686	LEVER ASSEM. (Includes)	1
	9S4466	LEVER ASSEM.	1
15	9M9788	PLUNGER	1
16	5H1351	PIN	1
17	7M7316	SPRING	1
18	2J157	SEAL	2
19	8L6206	PLATE	1
	8L6207	GASKET	1
20	1A2029	BOLT	6
	3B4506	LOCKWASHER	6
21	S1617	BOLT	4
	3B4505	LOCKWASHER	4

225533

8N4859 GOVERNOR GROUP—Part 3 of 4
Serial No. 46B8125—Up

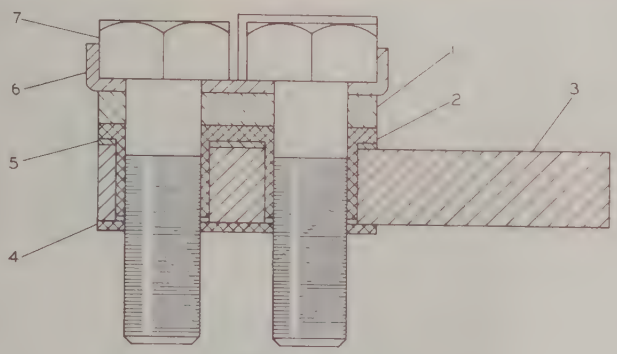


ENLARGED VIEW OF AREA D

REF. NO.	PART NUMBER	DESCRIPTION	QTY
1	9L6422	SPRING	1
2	9M4704	SCREW	1
3	8L4154	COLLAR	1
4	1B4201	NUT	1
5	8L4155	SCREW	1
6	8H9181	SPRING	1
7	6N3504	SEAT	1
8	9M6303	SPRING	1
9	2P8630	DOWEL	1
10	7M7193	RACE	2
11	7M7219	BEARING	1
12	3K810	RING	1
13	2S7	SLEEVE	1
14	4N3887	RING	1
15	9M6302	WASHER	2
16	6N8629	SEAT	1
17	8M8739	BOLT	1
18	4N6681	SPRING---------(outer)---------	1

225536

8N4859 GOVERNOR GROUP—Part 4 of 4
Serial No. 46B8125—Up



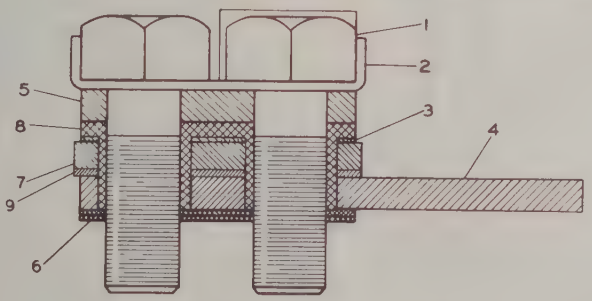
	REF. NO.	PART NUMBER	DESCRIPTION	QTY
C	1	8M9062	RETAINER	1
C	2	1P6452	INSULATOR	1
C	3	1P6453	BAR	1

C INDICATES CHANGE

C	4	1P9958	INSULATOR	1
C	5	8S4317	CONTACT	1
	6	9M6292	LOCK	1
C	7	4F7957	BOLT	2

137172

9S3312 RACK STOP GROUP
Serial No. 46B5065 to 46B5232 inclusive.
Part of 4N9845 Governor Group shown on Page 37A

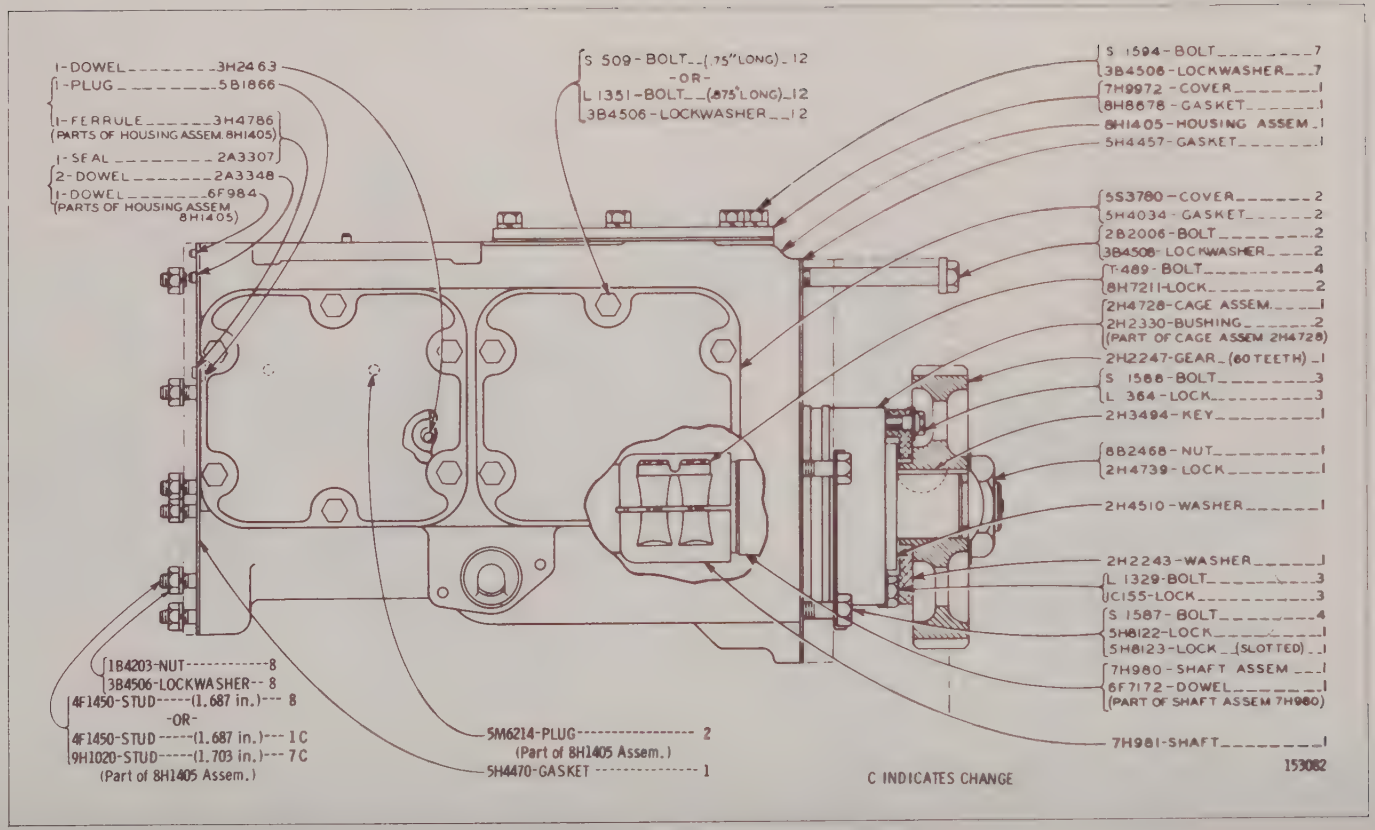


	REF NO	PART NUMBER	DESCRIPTION	QTY
	1	4F7957	BOLT	2
	2	9M6292	LOCK	1
	3	4N4218	CONTACT	1
	4	2S7391	BAR	1
	5	8M9062	RETAINER	1
C	6	1P9958	INSULATOR	2
	7	3S602	RETAINER	1
	8	1P6452	INSULATOR	1
C	9	9L7235	SHIM	1

C INDICATES CHANGE

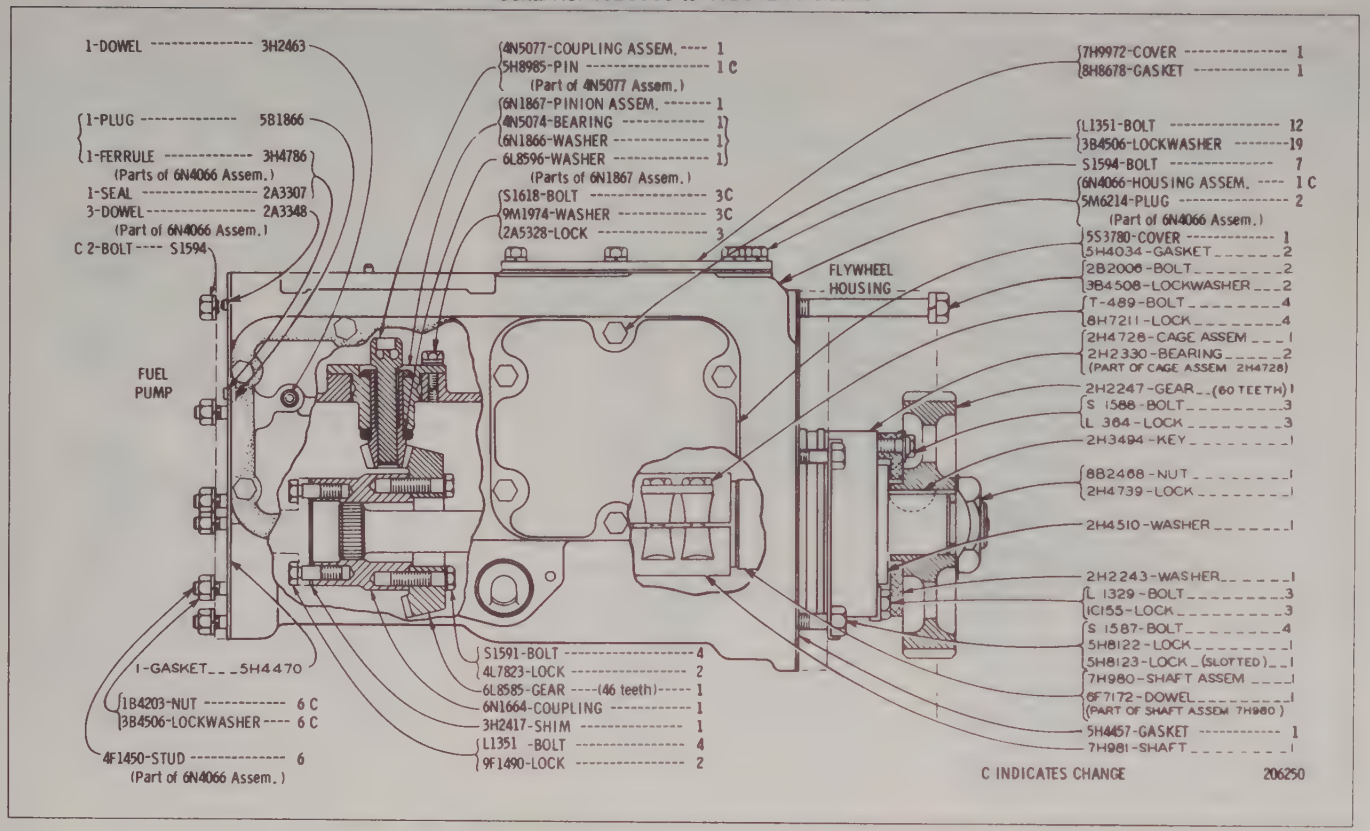
203605

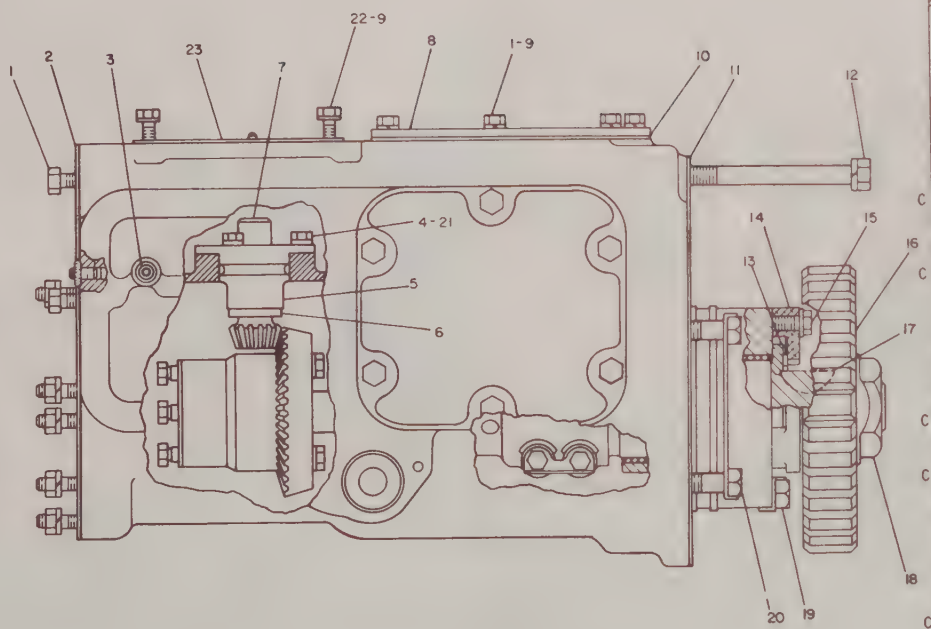
4N4267 GOVERNOR TORQUE SPRING GROUP
Serial No. 46B5233—Up
Part of 4N9845 Governor Group shown on Pages 37D & 37G



5H1117 FUEL PUMP AND GOVERNOR DRIVE GROUP
Serial No. 46B1558 to 46B5064 inclusive

FUEL PUMP AND GOVERNOR (6N50 N/S)
Serial No. 46B5065 to 46B8124 inclusive





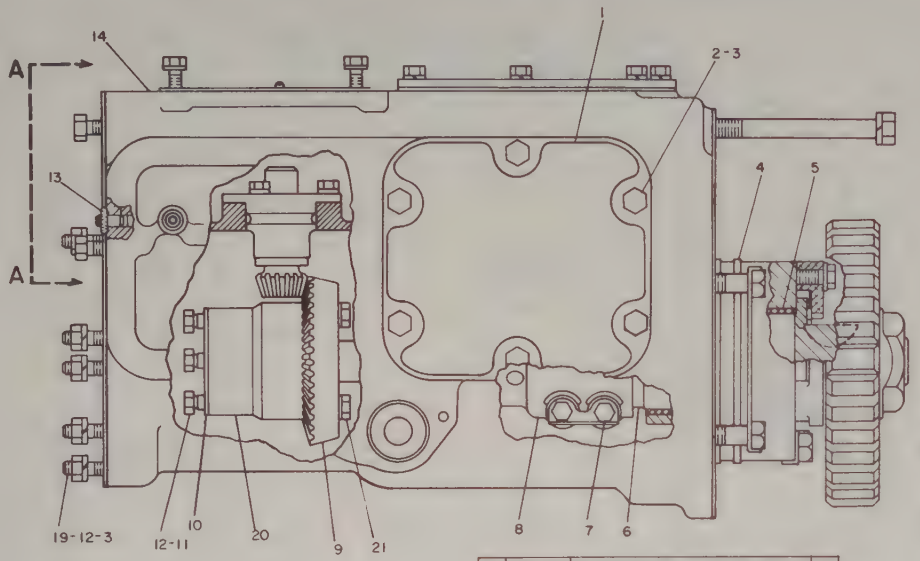
REF. NO.	PART NUMBER	DESCRIPTION	QTY.
1	S1594	BOLT	9
2	5H4470	GASKET	1
3	3H2463	PIN	1
4	S1618	BOLT	3
	2A5328	LOCK	3
5	6N1867	PINION ASSEM. (Includes)	1
	4N5074	BEARING	1
	6N1866	WASHER	1
6	6L8596	WASHER	1
C 7	8N4768	COUPLING ASSEM. (Includes)	1
	5H8985	PIN	1
8	7H9972	COVER	1
C 9	3B4506	LOCKWASHER	13
10	8H8678	GASKET	1
11	5H4457	GASKET	1
12	2B2006	BOLT	2
	3B4508	LOCKWASHER	2
13	2H4510	WASHER	1
14	2H2243	WASHER	1
15	S1588	BOLT	3
C	5M2894	WASHER	3
16	2H2247	GEAR (60 teeth)	1
17	2H3494	KEY	1
C 18	8B2468	NUT	1
	2H4739	LOCK	1
19	L1329	BOLT	3
	1C155	LOCK	3
20	S1587	BOLT	4
	5H8122	LOCK	1
	5H8123	LOCK (slotted)	1
21	9M1974	WASHER	3
C 22	1A2029	BOLT	6
C 23	4N5196	GASKET	1

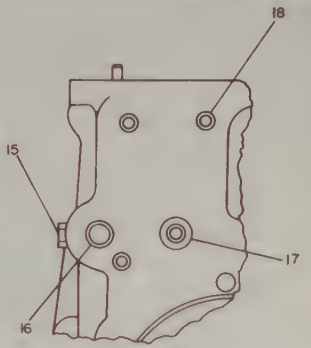
C INDICATES CHANGE

225534

6N50 FUEL PUMP AND GOVERNOR GROUP—Part 1
Serial No. 46B8125—Up

6N50 FUEL PUMP AND GOVERNOR GROUP—Part 2
Serial No. 46B8125—Up





VIEW A-A

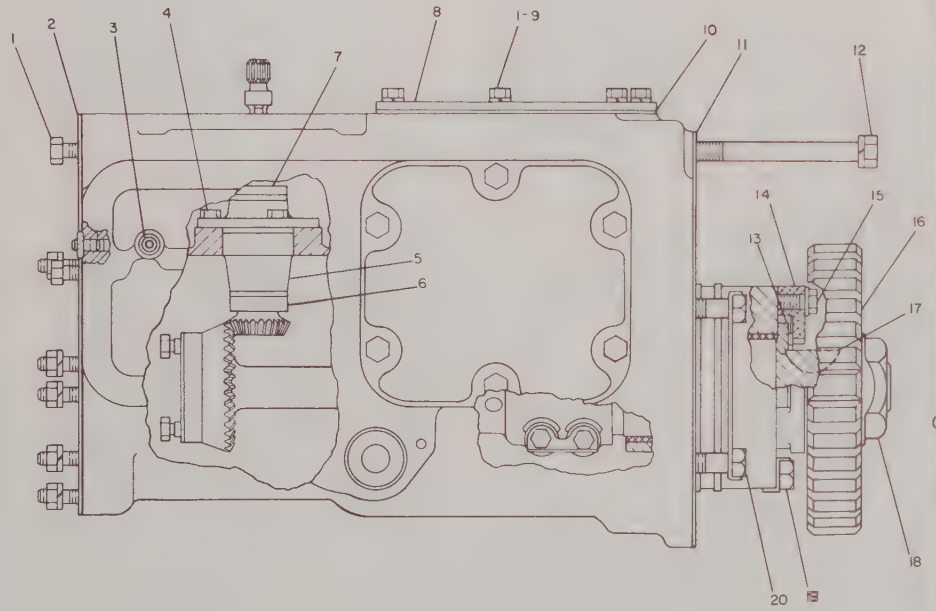
REF. NO.	PART NUMBER	DESCRIPTION	QTY.
1	5S3780	COVER	1
	5H4034	GASKET	2
2	L1351	BOLT	16
3	3B4506	LOCKWASHER	18

	4	2H4728	CAGE ASSEM. (Includes)	1
	5	2H2330	BEARING	2
	6	7H980	SHAFT ASSEM. (Includes)	1
		6F7172	DOWEL	1
C	7	T489	BOLT	4
		8H7211	LOCK	2
	8	7H981	SHAFT	1

9	6L8585	GEAR—(46 teeth)	1
10	3H2417	SHIM	1
11	4B6697	BOLT	4
	9F1490	LOCK	2
12	1B4203	NUT	6
13	2A3307	SEAL	1
14	6N4066	HOUSING ASSEM. (Includes)	1
15	5M6214	PLUG	2
16	5B1866	PLUG	1
17	3H4768	FERRULE	1
18	2A3348	DOWEL	3
19	4F1450	STUD	6
20	6N1664	COUPLING	1
21	S1591	BOLT	4
	4L7823	LOCK	2

C INDICATES CHANGE

225535



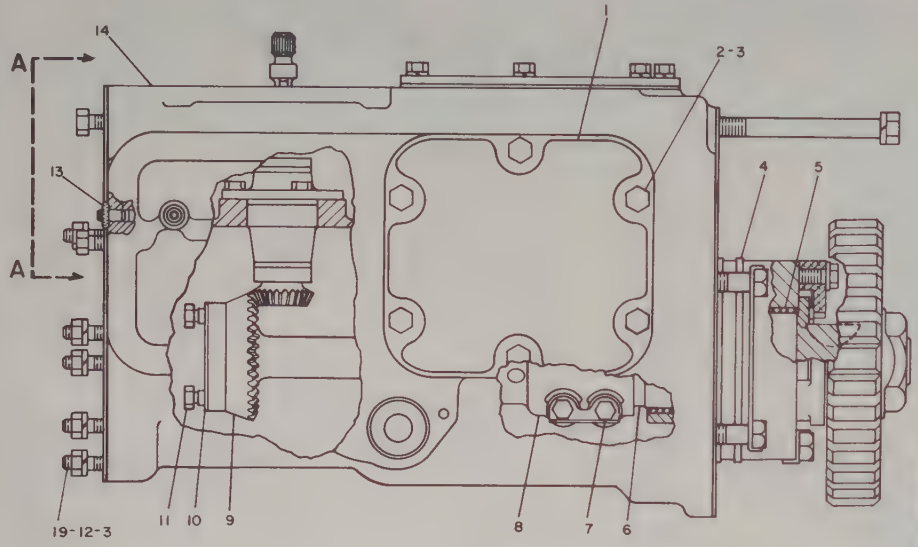
REF NO	PART NUMBER	DESCRIPTION	QTY
1	S1594	BOLT	9
2	5H4470	GASKET	1
3	3H2463	PIN	1
4	S1617	BOLT	3
	2A5328	LOCK	3
5	6N109	PINION ASSEM. (Includes)	1
	9M1704	CAGE ASSEM.	1
6	6N108	PINION	1
7	6H3492	WASHER	1
8	7H9972	COVER	1
9	3B4506	LOCKWASHER	7
10	8H8678	GASKET	1
11	5H4457	GASKET	1
12	2B2006	BOLT	2
	3B4508	LOCKWASHER	2
13	2H4510	WASHER	1
14	2H2243	WASHER	1
15	S1588	BOLT	3
	5M2894	WASHER	3
16	2H2247	GEAR (60 teeth)	1
17	2H3494	KEY	1
C 18	8B2468	NUT	1
	2H4739	LOCK	1
19	L1329	BOLT	3
	1C155	LOCK	3
20	S1587	BOLT	4
	5H8122	LOCK	1
	5H8123	LOCK (slotted)	1

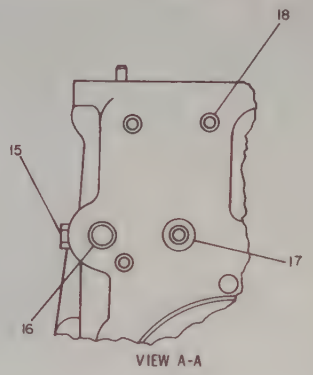
C INDICATES CHANGE

227869

7N4201 GOVERNOR AND FUEL PUMP DRIVE GROUP—Part 1
Serial No. 46B6559—Up

7N4201 GOVERNOR AND FUEL PUMP DRIVE GROUP—Part 2
Serial No. 46B6559—Up



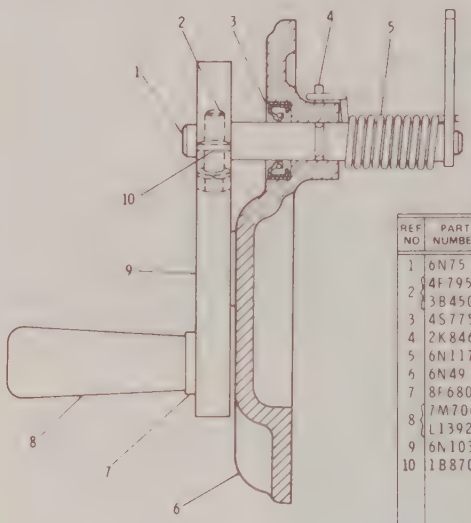


REF. NO.	PART NUMBER	DESCRIPTION	QTY
1	5S3780	COVER	1
	5H4034	GASKET	2
2	L1351	BOLT	12
3	3B4506	LOCKWASHER	18

4	2H4728	CAGE ASSEM. (Includes)	1
5	2H2330	BEARING	2
6	7H980	SHAFT ASSEM. (Includes)	1
	6F7172	DOWEL	1
7	T489	BOLT	4
	8H7211	LOCK	2
8	7H981	SHAFT	1

9	9F1475	GEAR--------(35 teeth)	1
10	3H2417	SHIM	1
11	4B6697	BOLT	4
	9F1490	LOCK	2
12	1B4203	NUT	6
13	2A3307	SEAL	1
14	6N4066	HOUSING ASSEM. (Includes)	1
15	5M6214	PLUG	2
16	5B1866	PLUG	1
17	3H4786	FERRULE	1
18	2A3348	DOWEL	3
19	4F1450	STUD	6

221843

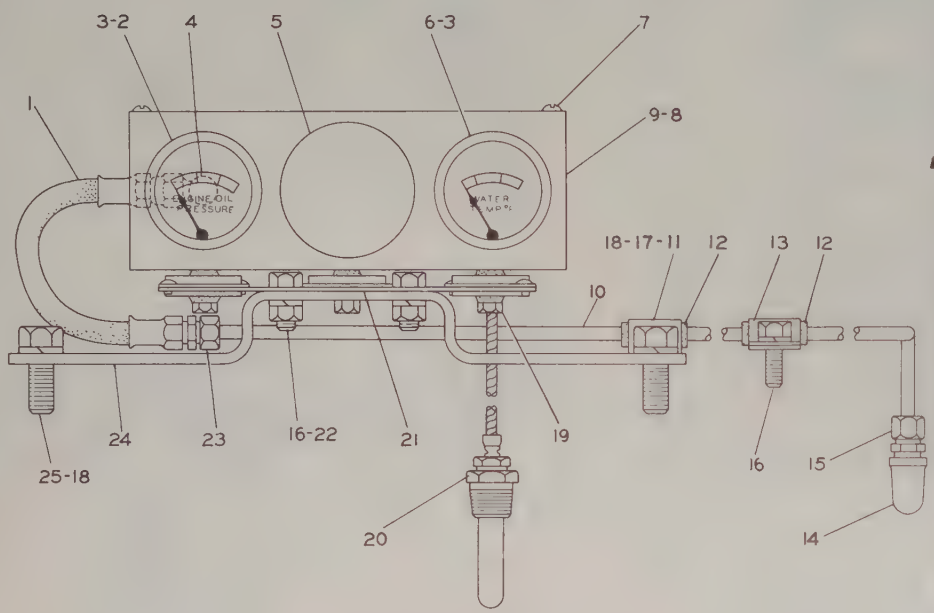


REF NO.	PART NUMBER	DESCRIPTION	QTY
1	6N75	SHAFT ASSEM.	1
2	4F7957	BOLT	1
	3B4504	LOCKWASHER	1
3	4S7756	SEAL	1
4	2K8467	PIN	1
5	6N117	SPRING	1
6	6N149	COVER	1
7	8F6809	WASHER	1
8	7M706	KNOB	1
	L1392	STUD	1
9	6N103	LEVER	1
10	1B8701	KEY	1

153075

MANUAL SHUT-OFF COVER (6N136 N/S)
Serial No. 46B5065—Up

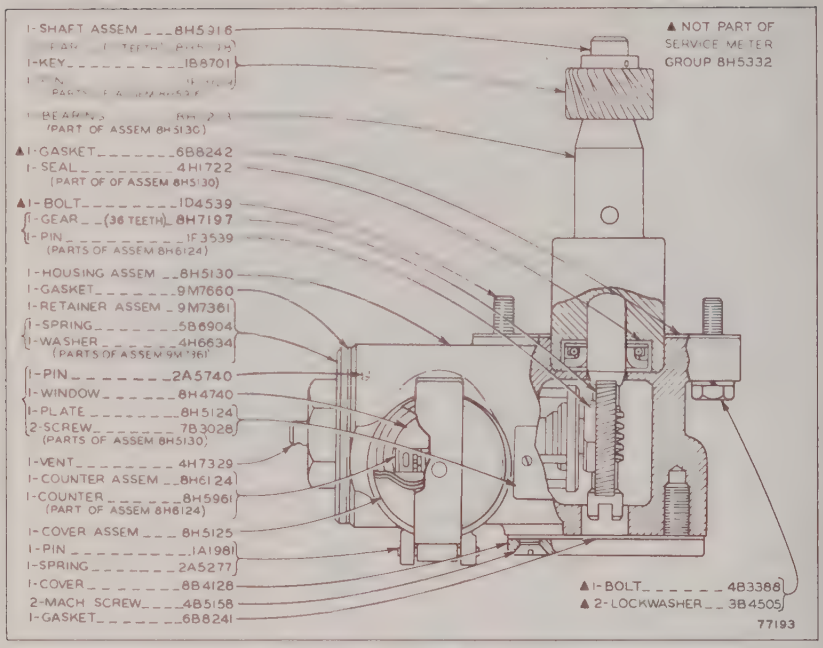
INSTRUMENT PANEL (2N4727 N/S)
Effective with Serial No. 46B3496



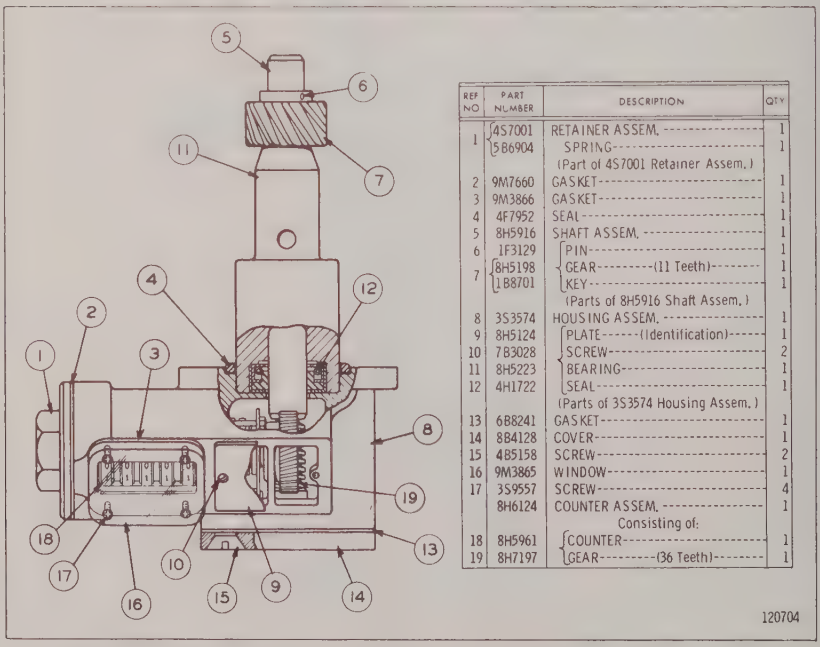
▲ ORDER BY THE FOOT

REF. NO.	PART NUMBER	DESCRIPTION	QTY
1	5L1393	HOSE ASSEM. --(16" long overall)--	1
2	2N2414	GAGE--------(Oil Pressure)-------	1
3	2N794	RETAINER----------	2
4	2L6094	ELBOW----------	1
5	1L6561	PLUG----------	1
6	2N2413	INDICATOR--------(Heat)---------	1
7	5S7348	SCREW----------	2
	4B2041	NUT----------	2
	9B1117	LOCKWASHER----------	2
8	2N179	COVER----------	1
9	2N178	PANEL----------	1
▲ 10	4S8385	TUBE----------6 Ft.	
11	4M5942	CLIP----------	1
12	4B6029	GROMMET----------	2
13	4B418	CLIP----------	1
14	3B6553	ELBOW----------	1
15	4H946	FITTING----------	1
	4H2495	NUT----------	1
	4H2494	SLEEVE----------	1
		(Parts of 4H946 Fitting)	
16	S509	BOLT----------	3
	3B4506	LOCKWASHER----------	3
17	S1620	BOLT----------	1
18	3B4508	LOCKWASHER----------	3
19	9F6580	BOLT----------	3
	1B4330	NUT----------	3
	3B4504	LOCKWASHER----------	3
20	5B1959	ADAPTER----------	1
	2B5721	GASKET----------	1
21	2N5848	BASE ASSEM.----------	1
22	1D4717	NUT----------	2
23	3B8995	FITTING----------	1
	1F1344	NUT----------	1
		(Part of 3B8995 Fitting)	
24	2N4604	BRACKET----------	1
25	S1595	BOLT----------	2

131370



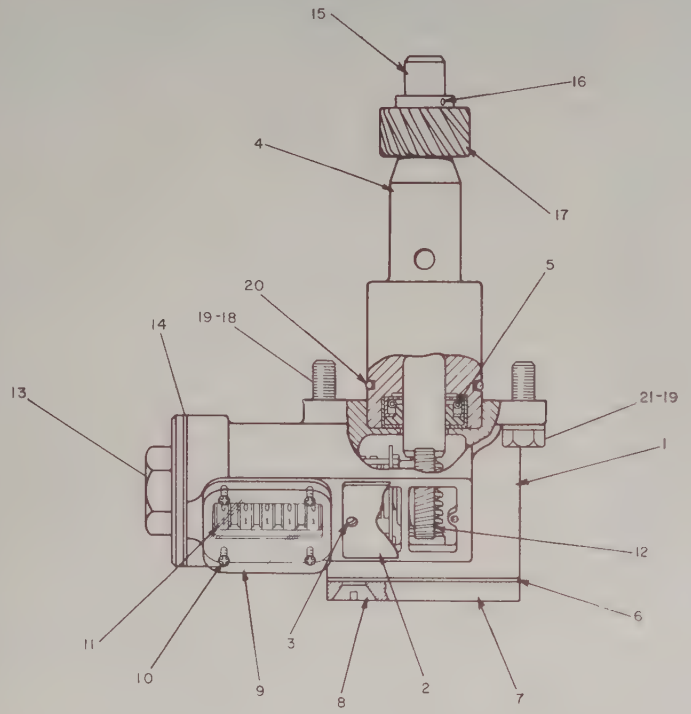
8H5332 SERVICE METER GROUP
Serial No. 46B1558 to 46B2217 inclusive and 77B1 to 77B220 inclusive



REF NO	PART NUMBER	DESCRIPTION	QTY
1	4S7001	RETAINER ASSEM.	1
	5B6904	SPRING	1
		(Part of 4S7001 Retainer Assem.)	
2	9M7660	GASKET	1
3	9M3866	GASKET	1
4	4F7952	SEAL	1
5	8H5916	SHAFT ASSEM.	1
6	1F3129	PIN	1
7	8H5198	GEAR (11 Teeth)	1
	1B8701	KEY	1
		(Parts of 8H5916 Shaft Assem.)	
8	3S3574	HOUSING ASSEM.	1
9	8H5124	PLATE (Identification)	1
10	7B3028	SCREW	2
11	8H5223	BEARING	1
12	4H1722	SEAL	1
		(Parts of 3S3574 Housing Assem.)	
13	6B8241	GASKET	1
14	8B4128	COVER	1
15	4B5158	SCREW	2
16	9M3865	WINDOW	1
17	3S9557	SCREW	4
	8H6124	COUNTER ASSEM.	1
		Consisting of:	
18	8H5961	COUNTER	1
19	8H7197	GEAR (36 Teeth)	1

6L9354 SERVICE METER GROUP
Serial No. 46B2218 to 46B2875 inclusive and 77B221 to 77B321 inclusive

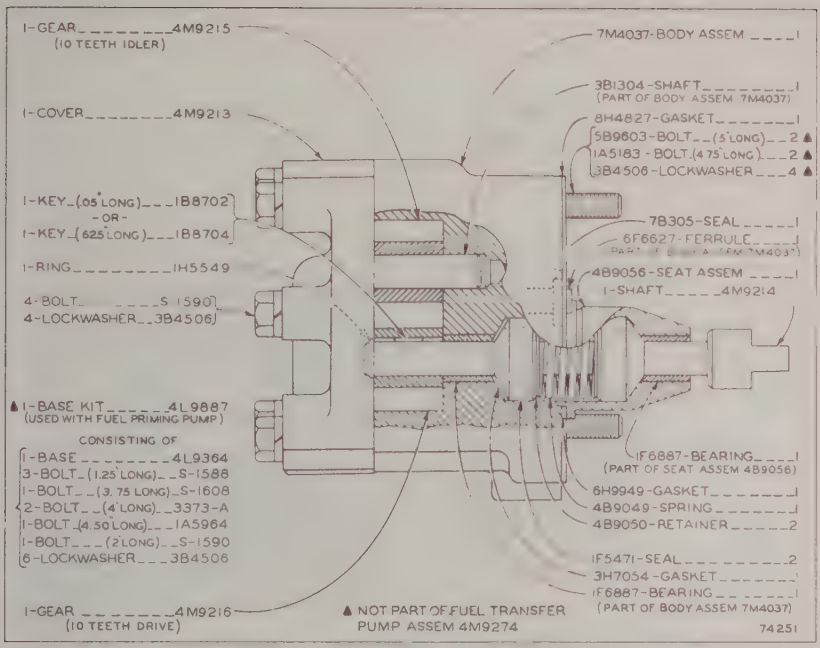
6L9354 SERVICE METER GROUP
Serial No. 46B2876—Up



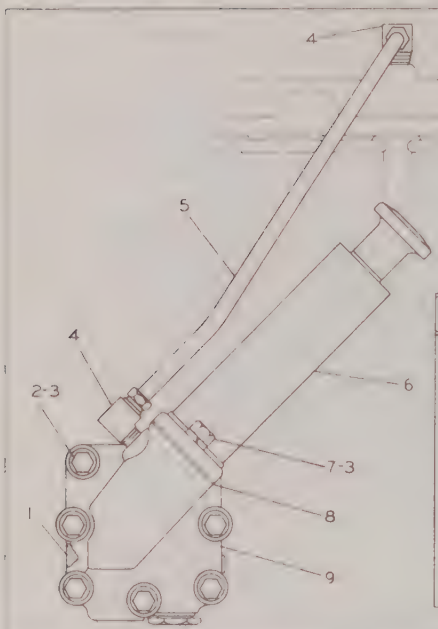
	REF. NO.	PART NUMBER	DESCRIPTION	QTY.
C	1	7L4855	SERVICE METER GROUP (Includes)	1
C		8S4995	HOUSING ASSEM. (Includes)	1
	2	8H5124	PLATE--(identification)	1
	3	7B3028	SCREW	2
	4	8S4994	BEARING	1
	5	4H1722	SEAL	1
	6	6B8241	GASKET	1
	7	8B4128	COVER	1
	8	4B5158	SCREW	2
	9	9M3865	WINDOW	1
		9M3866	GASKET	1
	10	3S9557	SCREW	4
	11	8H6124	COUNTER ASSEM. (Includes)	1
		8H5961	COUNTER	1
	12	8H7197	GEAR--(36 teeth)	1
	13	4S7001	RETAINER ASSEM. (Includes)	1
		5B6904	SPRING	1
	14	9M7660	GASKET	1
	15	8H5916	SHAFT ASSEM. (Includes)	1
	16	1F3129	PIN	1
	17	8H5198	GEAR--(11 teeth)	1
		1B8701	KEY	1
C	18	1D4539	BOLT--6.35 cm(2.5 in.) long	1
C	19	9M1974	WASHER	2
C	20	8M8515	SEAL	1
C	21	2B2695	BOLT--2.22 cm(.875 in.) long	1

C INDICATES CHANGE

175419



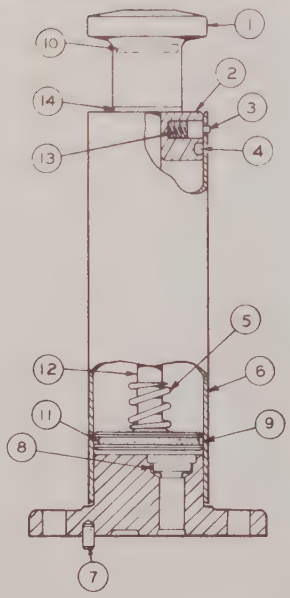
4M9274 FUEL TRANSFER PUMP ASSEMBLY
Serial No. 46B1558 to 46B3983 inclusive



REF. NO.	PART NUMBER	DESCRIPTION	QTY.
1	8H4827	GASKET	1
	1A5183	BOLT (4.75" Long)	2
2	8S9191	BOLT (4" Long)	1
	5B2638	BOLT (5.25" Long)	1
3	3B4506	LOCKWASHER	6
4	5K9235	FITTING	2
5	3N652	TUBE ASSEM.	1
6	1P2297	PUMP ASSEM. (See Separate Illustration)	1
7	1A2029	BOLT	2
8	8S6157	GASKET	1
9	3N653	PUMP ASSEM. (See Separate Illustration)	1
	7B305	SEAL	1

138179

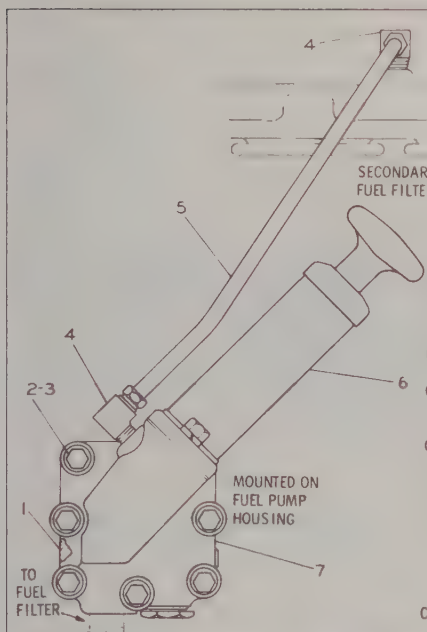
3N654 FUEL PRIMING AND TRANSFER PUMP GROUP
Serial No. 46B3984 to 46B5769 inclusive
1P2297 & 3N653 Pump parts are shown on Pages 39A and 39B



REF. NO.	PART NUMBER	DESCRIPTION	QTY.
1	7B8634	HANDLE	1
2	9S8017	CAP	1
3	9S8015	RETAINER	2
C 4	4F7391	SEAL	1
5	8M8210	SPRING	1
6	9S8020	BARREL ASSEM.	1
7	5L4197	PIN	1
8	1P2298	VALVE ASSEM.	2
9	1P2278	RING	1
10	9F7882	PIN	1
11	4F7391	SEAL	1
12	1P2280	ROD	1
13	9S4169	SPRING	2
14	9S8016	GASKET	1

C INDICATES CHANGE 209251

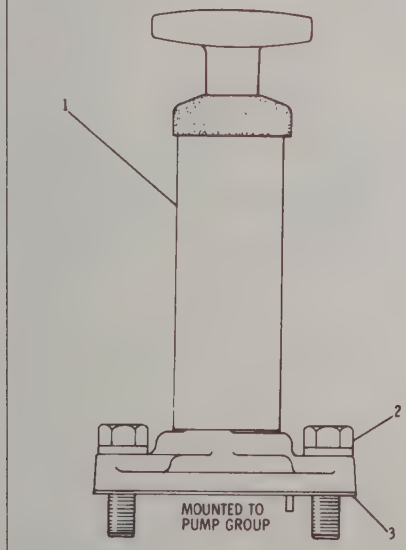
1P2297 FUEL PRIMING PUMP ASSEMBLY
Serial No. 46B3984 to 46B5769 inclusive. Part of 3N654 Fuel Priming and Transfer Pump Group. Note: For Field Replacement of 9S8020 Barrel Assembly order 6N9740 shown on Page 39A-2



	REF. NO	PART NUMBER	DESCRIPTION	QTY
	1	8H4827	GASKET	1
	2	1A5183	BOLT-12.06 cm(4.75 in.) long	2
C		8S9191	BOLT-10.16 cm(4 in.) long	2
		5B2638	BOLT-13.34 cm(5.25 in.) long	1
C	3	3B4506	LOCKWASHER	4
	4	5K9235	FITTING	2
	5	3N652	TUBE ASSEM.	1
C	6	8S7705	PUMP GROUP (Separate Illustration)	1
	9	3N653	PUMP ASSEM. (Separate Illustration)	1
		7B305	SEAL	1

C INDICATES CHANGE 162874

3N654 FUEL PRIMING AND TRANSFER PUMP GROUP
Serial No. 46B5770—Up
8S7705 & 3N653 Pump parts are shown on Pages 39A-1, 39A-2, 39B, 39C & 39D

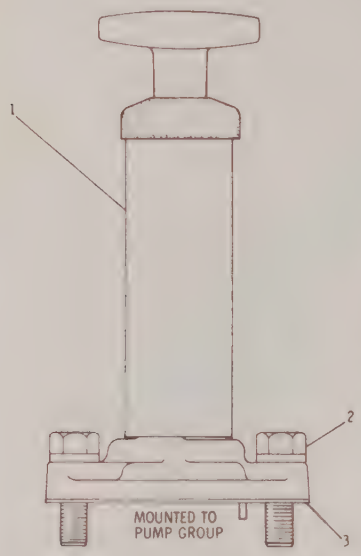


REF NO	PART NUMBER	DESCRIPTION	QTY
1	6N6803	PUMP GROUP	1
2	1A2029	BOLT	2
	5M2894	WASHER	2
3	6N6830	GASKET	1

THE FOLLOWING REPAIR KIT IS AVAILABLE:
C 7N6282-KIT-1

C INDICATES CHANGE 216625

8S7705 FUEL PRIMING PUMP GROUP
Serial No. 46B5770 to 46B7374 inclusive
Part of 3N654 Fuel Priming and Transfer Pump Group shown on Page 39A-1



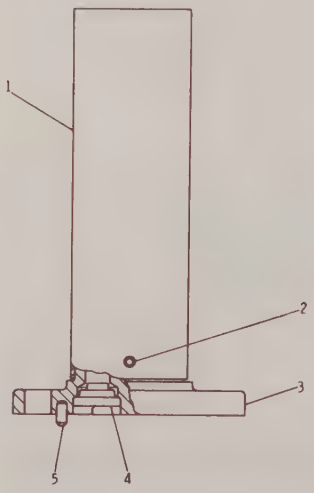
	REF NO	PART NUMBER	DESCRIPTION	QTY
C	1	8N495	PUMP GROUP-	1
	2	1A2029	BOLT	2
		5M2894	WASHER	2
	3	6N6830	GASKET	1

THE FOLLOWING REPAIR KIT IS AVAILABLE:
7N6282-KIT----------(knob)----------1
(Includes knob, cover, spring & washers)

C INDICATES CHANGE

172374

8S7705 FUEL PRIMING PUMP GROUP
Serial No. 46B7375—Up
Part of 3N654 Fuel Priming and Transfer Pump Group shown on Page 39A-1



REF. NO.	PART NUMBER	DESCRIPTION	QTY
1	9S8025	BARREL	1
2	8F6864	PIN	1
3	9S8018	BASE	1
4	1P2298	VALVE ASSEM.	2
5	5L4197	PIN	1

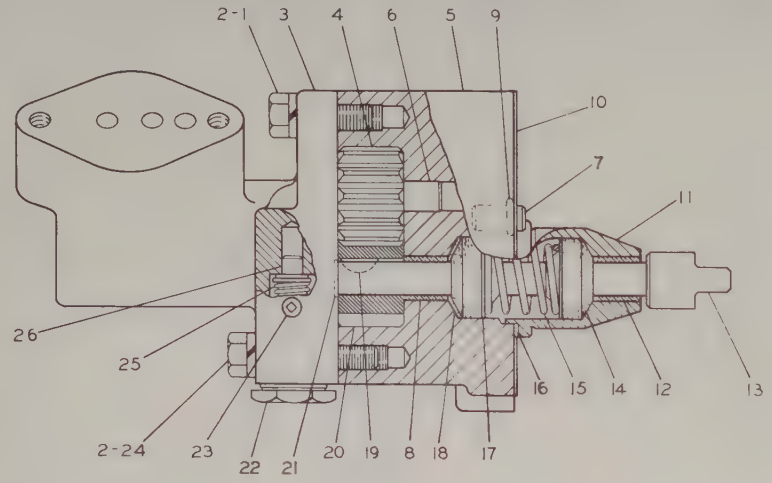
211811

6N9740 FUEL PRIMING PUMP BARREL ASSEMBLY
Serial No. 46B3984 to 46B5769 inclusive
Provides Field Replacement for 9S8020 Barrel Assembly shown on Page 39A

3N653 FUEL TRANSFER PUMP ASSEMBLY

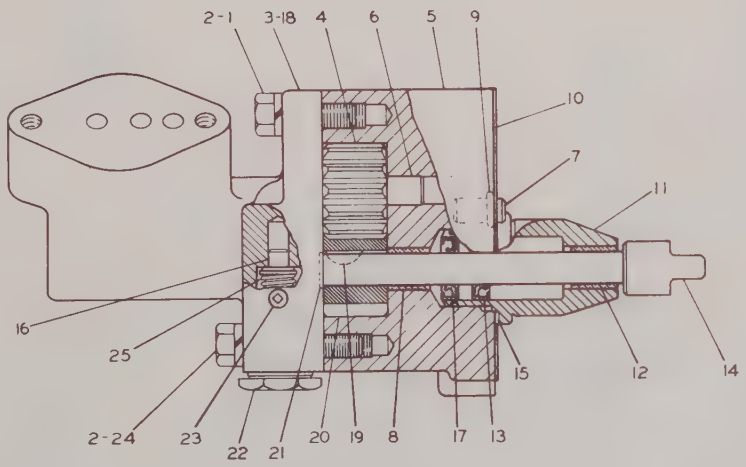
Serial No. 46B3984 to 46B5743 inclusive

Part of 3N654 Fuel Priming and Transfer Pump Group shown on Pages 39A & 39A-1



REF. NO.	PART NUMBER	DESCRIPTION	QTY
1	S1588	BOLT	2
2	3B4506	LOCKWASHER	4
3	3N509	BASE	1
4	4M9215	GEAR--------(10 Teeth-Idler)	1
5	7M4037	BODY ASSEM.	1
6	3B1304	SHAFT	1
7	6F6627	FERRULE	1
8	1F6887	BEARING	1
9	7B305	SEAL	1
10	8H4827	GASKET	1
11	4B9056	SEAT ASSEM.	1
12	1F6887	BEARING	1
13	4M9214	SHAFT	1
14	5M6038	SEAL	2
15	9M58	SPRING	1
16	6H9949	GASKET	1
17	4B9050	RETAINER	2
18	9M57	GASKET	1
19	1B8704	KEY	1
20	4M9216	GEAR	1
21	1H5549	RING	1
22	7S4440	BOLT	1
	2A1913	GASKET	1
23	9F2247	PLUG	1
24	S1590	BOLT	2
25	1N5899	SPRING	1
26	1N5898	PLUNGER ASSEM.	1

138180



	REF. NO	PART NUMBER	DESCRIPTION	QTY
	1	S1588	BOLT	2
	2	3B4506	LOCKWASHER	4
	3	3N509	BASE	1
	4	4M9215	GEAR--(10 Teeth-Idler)	1
C	5	6N1814	BODY ASSEM.	1
	6	3B1304	SHAFT	1
	7	6F6627	FERRULE	1
	8	1F6887	BEARING	1
	9	7B305	SEAL	1
	10	8H4827	GASKET	1
C	11	4N8443	SEAT ASSEM.	1
	12	1F6887	BEARING	1
	13	4N4249	SEAL	2
	14	4M9214	SHAFT	1
	15	6H9949	GASKET	1
	16	1N5898	PLUNGER ASSEM.	1
C	17	3D2992	SEAL	1
C	18	7M7260	LIQUID GASKET	
	19	1B8704	KEY	1
	20	4M9216	GEAR	1
	21	1H5549	RING	1
	22	7S4440	BOLT	1
C		4N7465	GASKET	1
	23	9F2247	PLUG	1
	24	S1590	BOLT	2
	25	1N5899	SPRING	1
	26	1N5898	PLUNGER ASSEM.	1

C INDICATES CHANGE

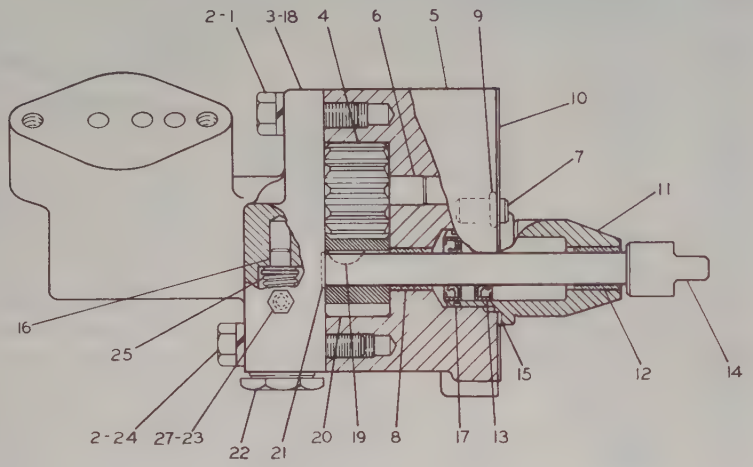
161024

3N653 FUEL TRANSFER PUMP ASSEMBLY—Type 1
Serial No. 46B5744—Up
Part of Fuel Priming and Transfer Pump Group shown on Pages 39A & 39A-1

3N653 FUEL TRANSFER PUMP ASSEMBLY—Type 2

Serial No. 46B5744—Up

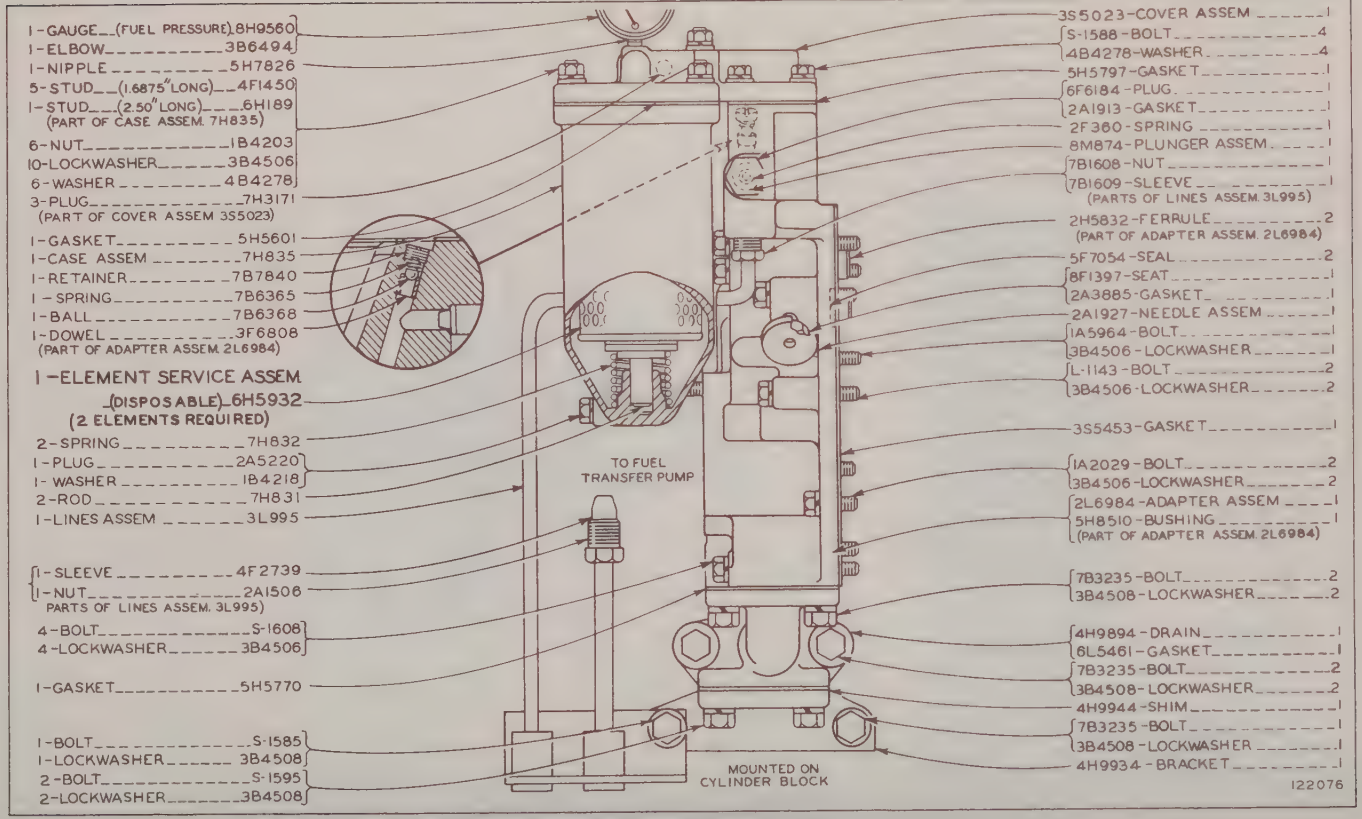
Part of 3N654 Fuel Priming and Transfer Pump Group shown on Pages 39A and 39A-1



	REF. NO.	PART NUMBER	DESCRIPTION	QTY
	1	S1588	BOLT	2
	2	3B4506	LOCKWASHER	4
C	3	7N6191	BASE	1
	4	4M9215	GEAR—(10 Teeth-Idler)	1
	5	6N1814	BODY ASSEM.	1
	6	3B1304	SHAFT	1
	7	6F6627	FERRULE	1
	8	1F6887	BEARING	1
	9	7B305	SEAL	1
	10	8H4827	GASKET	1
	11	4N8443	SEAT ASSEM.	1
	12	1F6887	BEARING	1
	13	4N4249	SEAL	2
	14	4M9214	SHAFT	1
	15	6H9949	GASKET	1
	16	1N5898	PLUNGER ASSEM.	1
	17	3D2992	SEAL	1
	18	7M7260	LIQUID GASKET	
	19	1B8704	KEY	1
	20	4M9216	GEAR	1
	21	1H5549	RING	1
	22	7S4440	BOLT	1
		4N7465	GASKET	1
C	23	1N5999	PLUG	1
	24	S1590	BOLT	2
	25	1N5899	SPRING	1
	26	1N5898	PLUNGER ASSEM.	1
C	27	7J204	SEAL	1

C INDICATES CHANGE

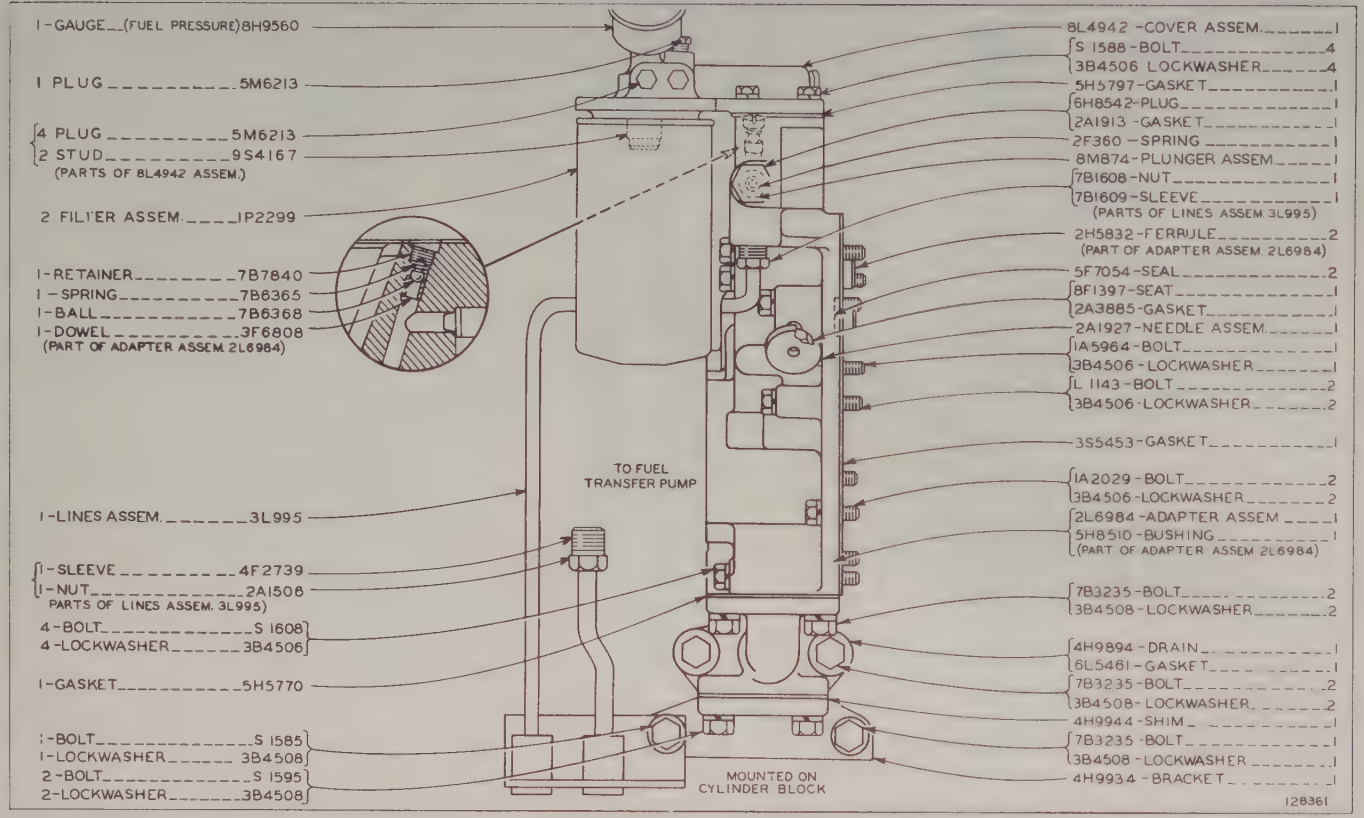
167648

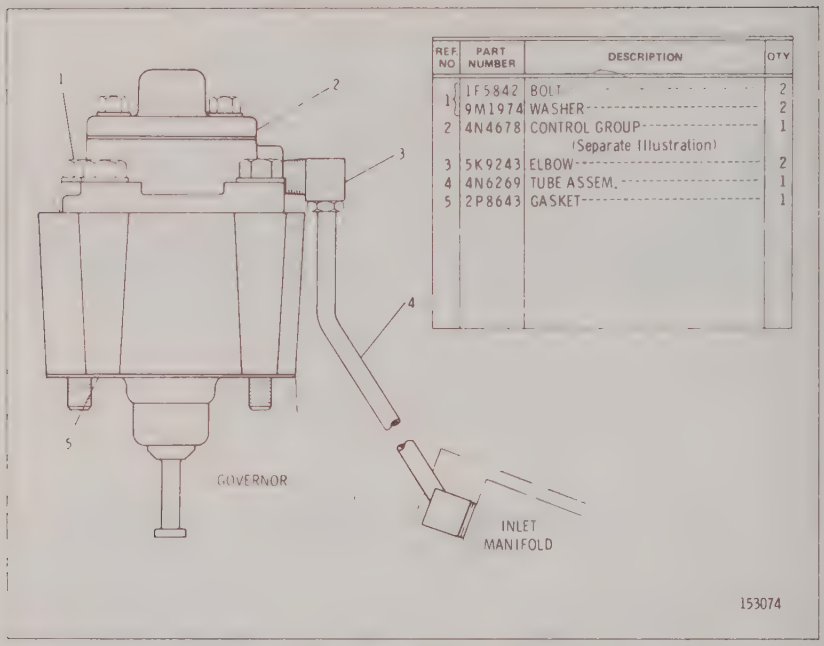


FUEL FILTER (2L6985 N/S)

Serial No. 46B1558 to 46B2354 and 46B2392 to 46B3012 inclusive and 77B1 to 77B269 and 77B283—Up

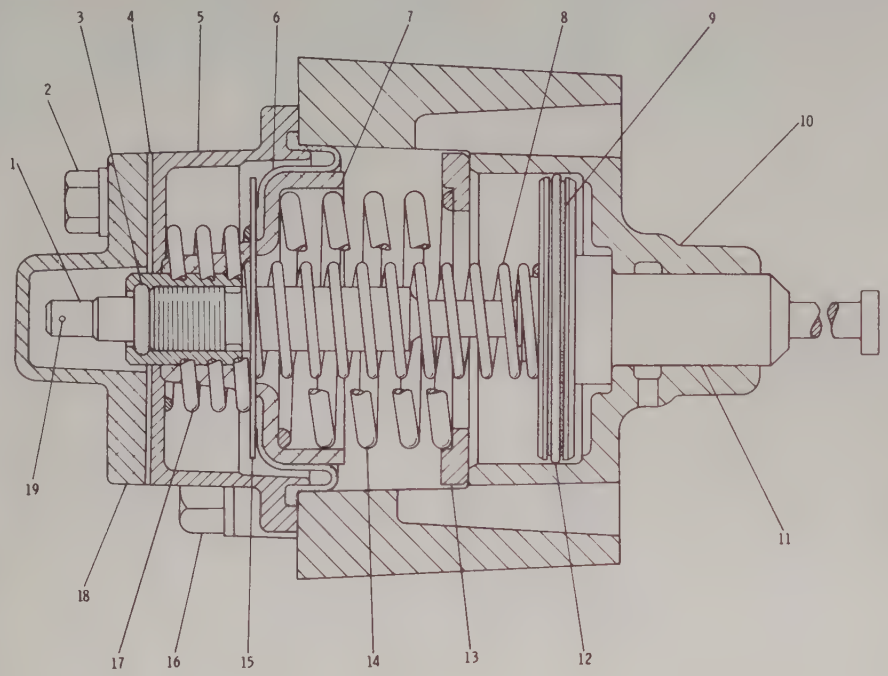
8L4941 FUEL FILTER GROUP
Serial No. 46B3013—Up





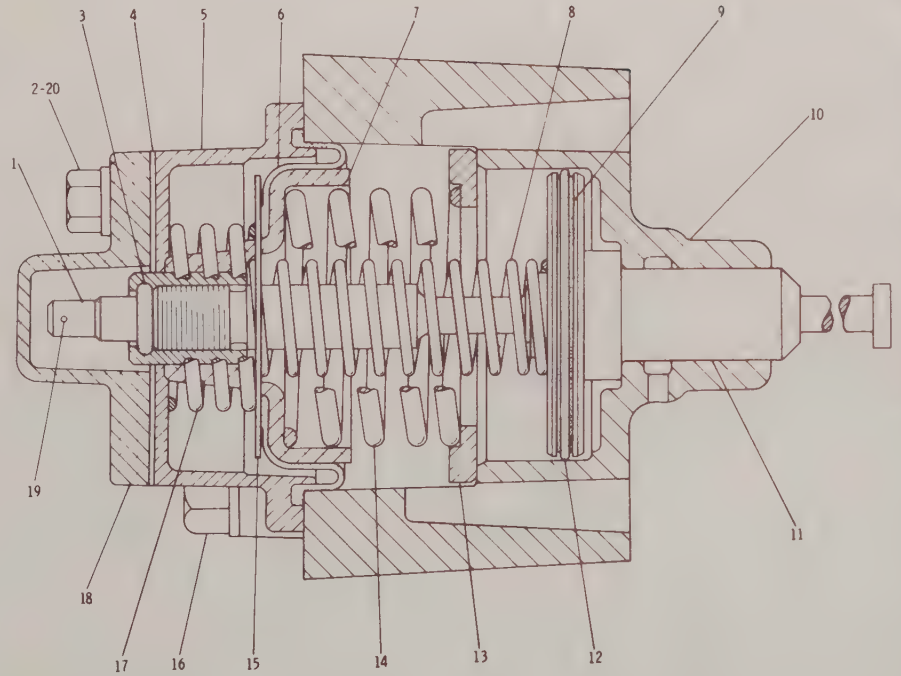
REF NO	PART NUMBER	DESCRIPTION	QTY
1	1F5842	BOLT	2
	9M1974	WASHER	2
2	4N4678	CONTROL GROUP (Separate Illustration)	1
3	5K9243	ELBOW	2
4	4N6269	TUBE ASSEM.	1
5	2P8643	GASKET	1

4N6510 FUEL RATIO CONTROL GROUP
Serial No. 46B5065—Up
4N4678 Control parts are shown on Pages 40-3, 40-4 & 40-5



REF. NO	PART NUMBER	DESCRIPTION	QTY
1	2P8939	VALVE	1
2	2N5919	BOLT	3
	5P537	WASHER	3
3	4J2506	SEAL	1
4	6L5766	GASKET	1
5	2P8226	COVER	1
6	2P8804	DIAPHRAGM	1
7	2P8875	RETAINER ASSEM.	1
8	6N515	SPRING (inner)	1
9	3P1979	SEAL	1
10	2P8225	HOUSING	1
11	2P8802	VALVE ASSEM.	1
12	2P8234	SEAL	1
13	2P8801	RETAINER	1
14	6N514	SPRING (outer)	1
15	2P8803	WASHER	1
16	6L2376	BOLT	2
	9M1974	WASHER	2
17	6N513	SPRING	1
18	2P8882	COVER	1
C 19	9F7882	PIN	1

C INDICATES CHANGE 151991



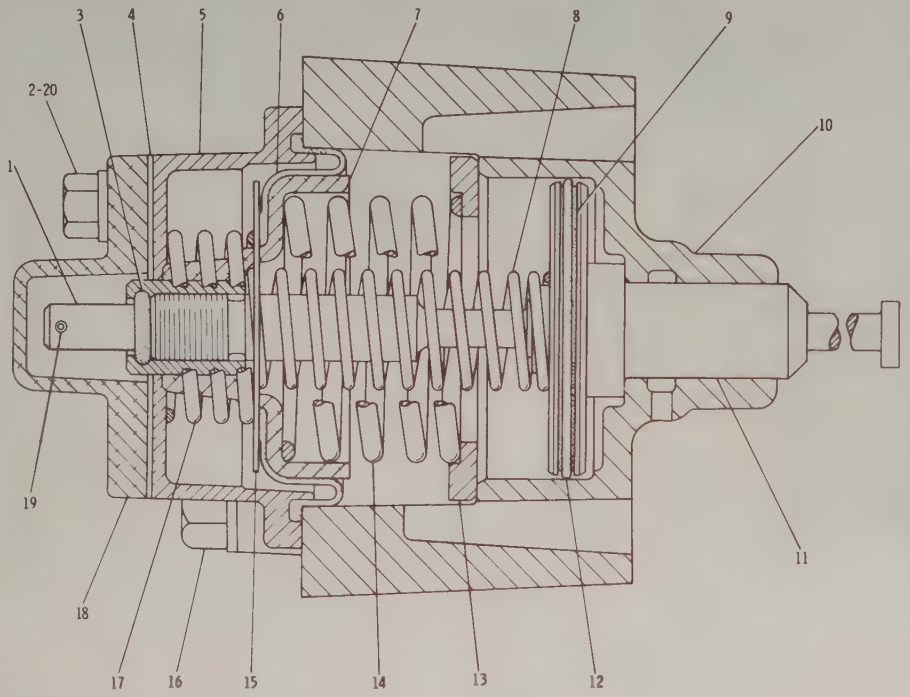
	REF NO	PART NUMBER	DESCRIPTION	QTY
	1	2P8939	VALVE	1
	2	5P537	WASHER	3
	3	4J2506	SEAL	1
	4	6L5766	GASKET	1
	5	2P8226	COVER	1
	6	2P8804	DIAPHRAGM	1
	7	2P8875	RETAINER ASSEM.	1
	8	6N515	SPRING (inner)	1
C	9	5K227	SEAL	1
	10	2P8225	HOUSING	1
	11	2P8802	VALVE ASSEM.	1
	12	2P8234	SEAL	1
	13	2P8801	RETAINER	1
	14	6N514	SPRING (outer)	1
	15	2P8803	WASHER	1
C	16	4B3388	BOLT	2
		8F7242	WASHER	2
	17	6N513	SPRING	1
	18	2P8882	COVER	1
C	19	9F7882	PIN	1
C	20	S1615	BOLT .75 in. (19.05 mm) long	2
		S1347	BOLT .187 in. (4.75 mm) long	1

C INDICATES CHANGE

153454

4N4678 FUEL RATIO CONTROL GROUP
Serial No. 46B5082 to 46B5637 inclusive
Part of 4N6510 Fuel Ratio Control Group shown on Page 40-2

4N4678 FUEL RATIO CONTROL GROUP
Serial No. 46B5638—Up
Part of 4N6510 Fuel Ratio Control Group shown on Page 40-2



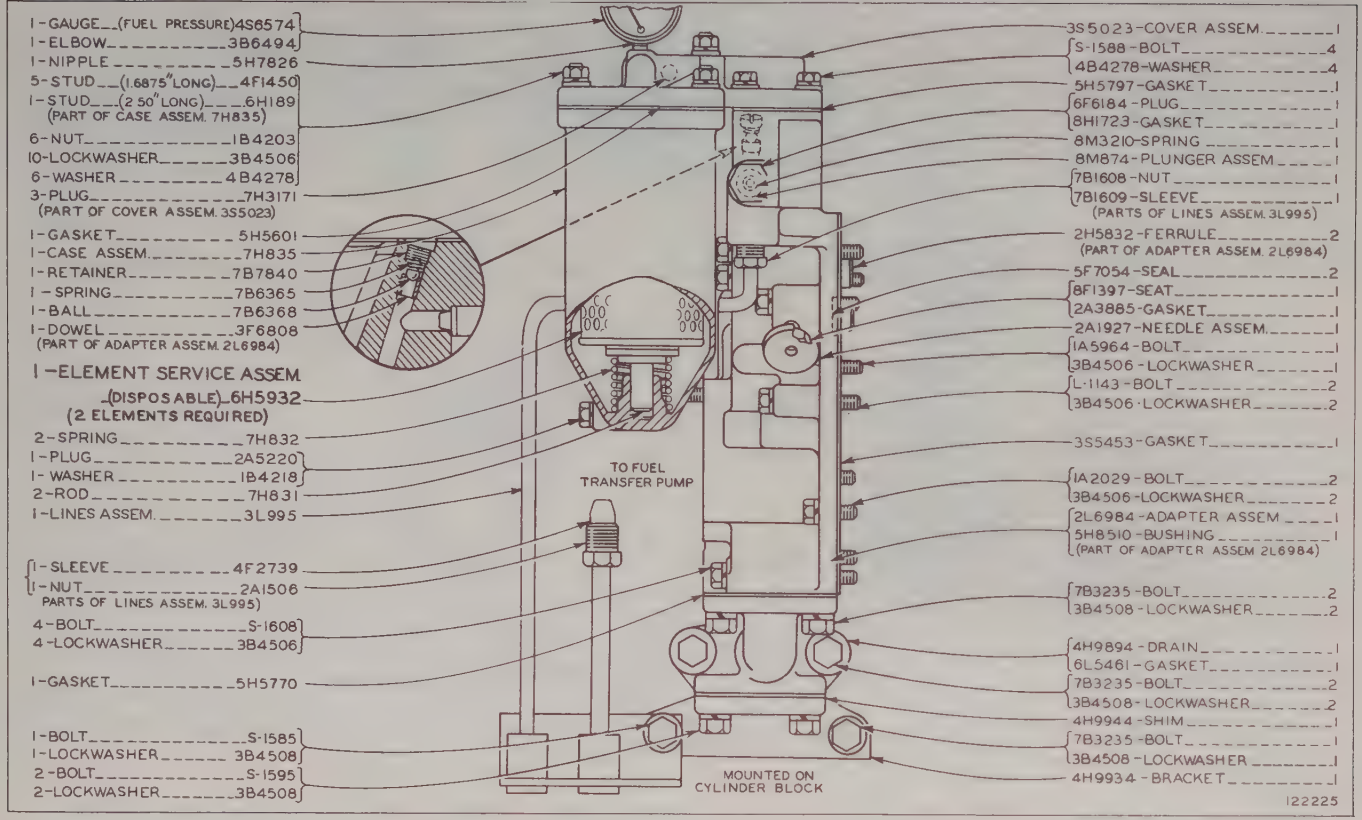
REF NO	PART NUMBER	DESCRIPTION	QTY
1	2P8939	VALVE	1
C 2	9S5282	WASHER	3
3	4J2506	SEAL	1
4	6L5766	GASKET	1
5	2P8226	COVER	1
6	2P8804	DIAPHRAGM	1
7	2P8875	RETAINER ASSEM.	1
8	6N515	SPRING-(inner)	1
C 9	3P1979	SEAL	1
10	2P8225	HOUSING	1
11	2P8802	VALVE ASSEM.	1
12	2P8234	SEAL	1
13	2P8801	RETAINER	1
C 14	7N209	SPRING-(outer)	1
15	2P8803	WASHER	1
16	4B3388	BOLT	2
	8F7242	WASHER	2
17	6N513	SPRING	1
C 18	6N7148	COVER	1
C 19	7N5715	PIN	1
20	S1615	BOLT-19.05 mm (.75 in.)long	2
	S1347	BOLT-4.75 mm (.187 in.)long	1
		-OR-	
C	6V2627	BOLT-(12 Point Head)	3

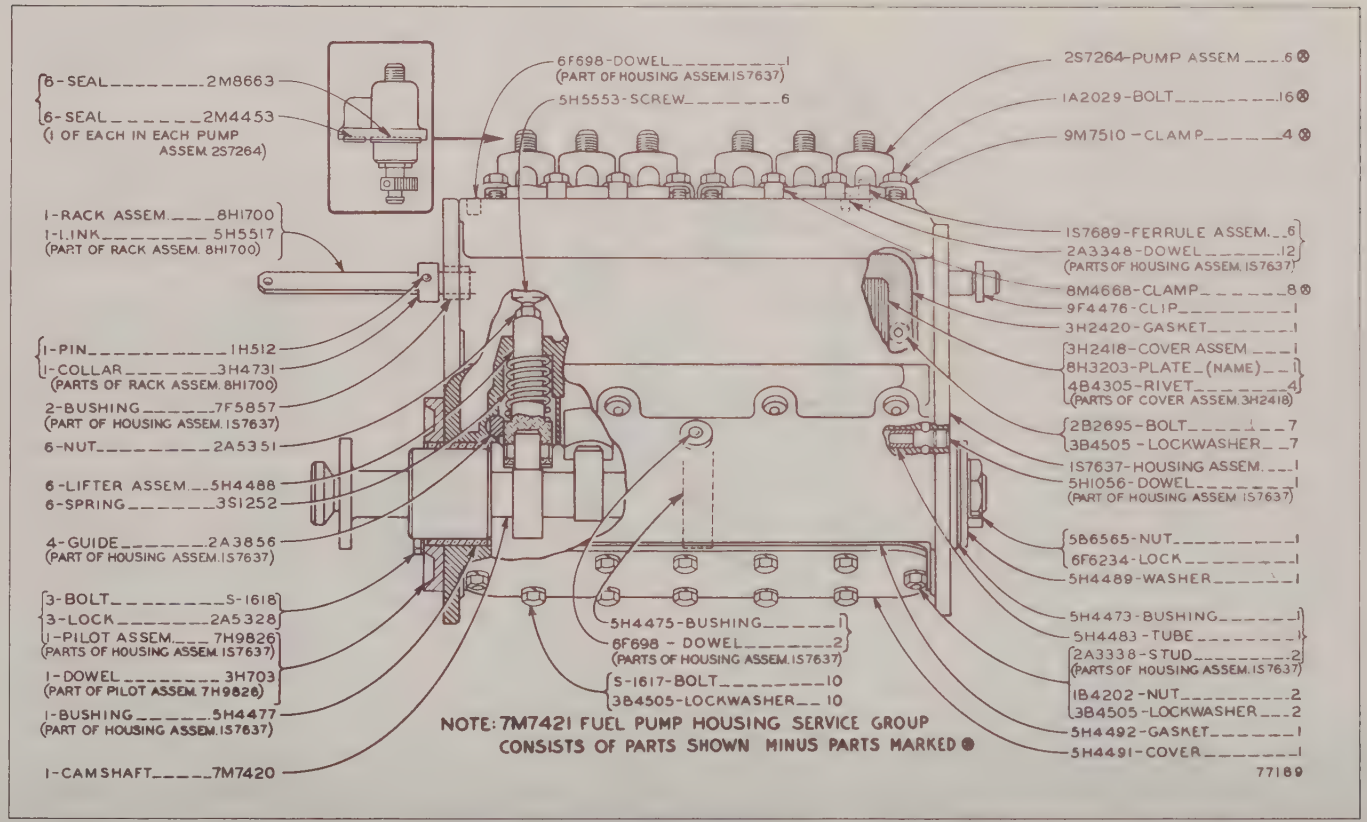
C INDICATES CHANGE

232039

FUEL FILTER

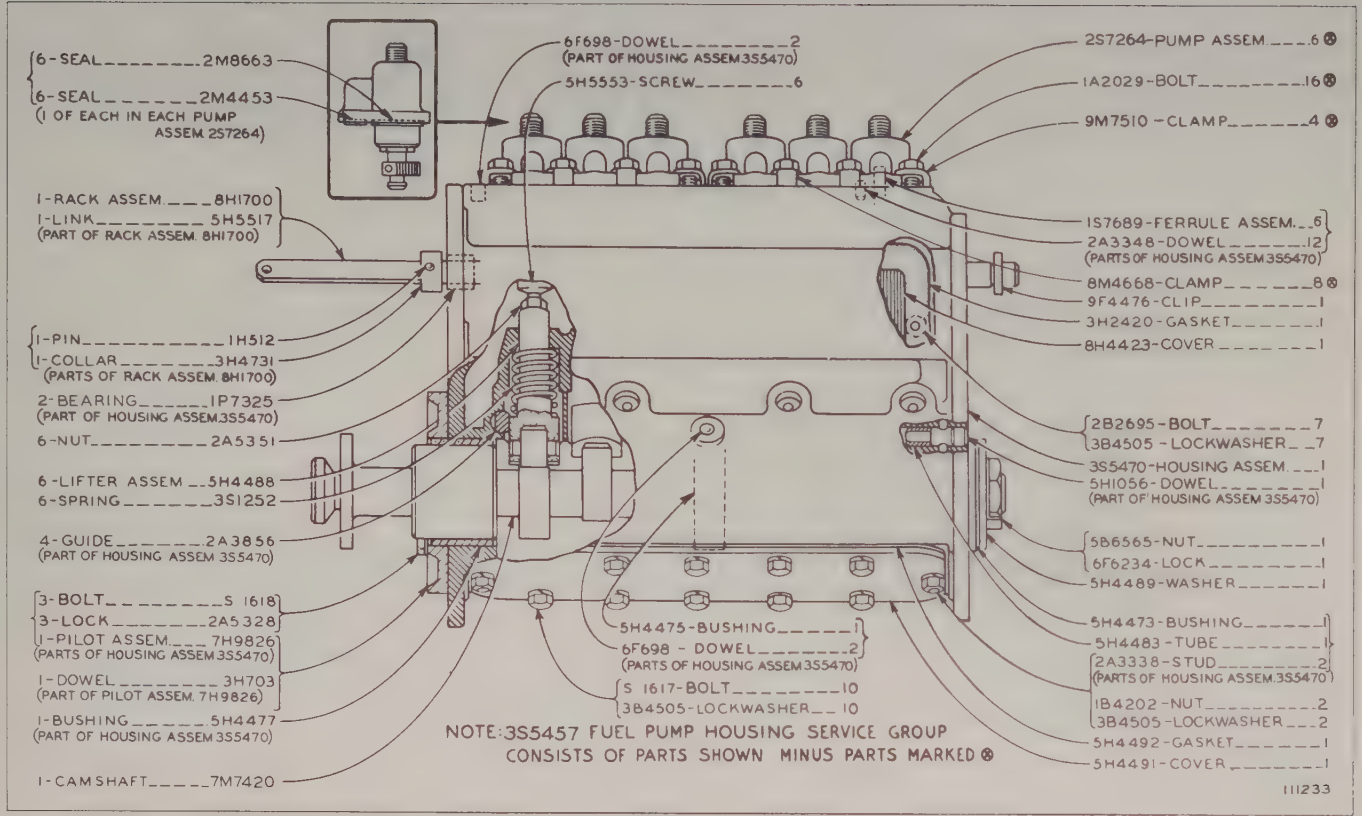
Serial No. 46B2355 to 46B2391 inclusive and 77B270 to 77B282 inclusive



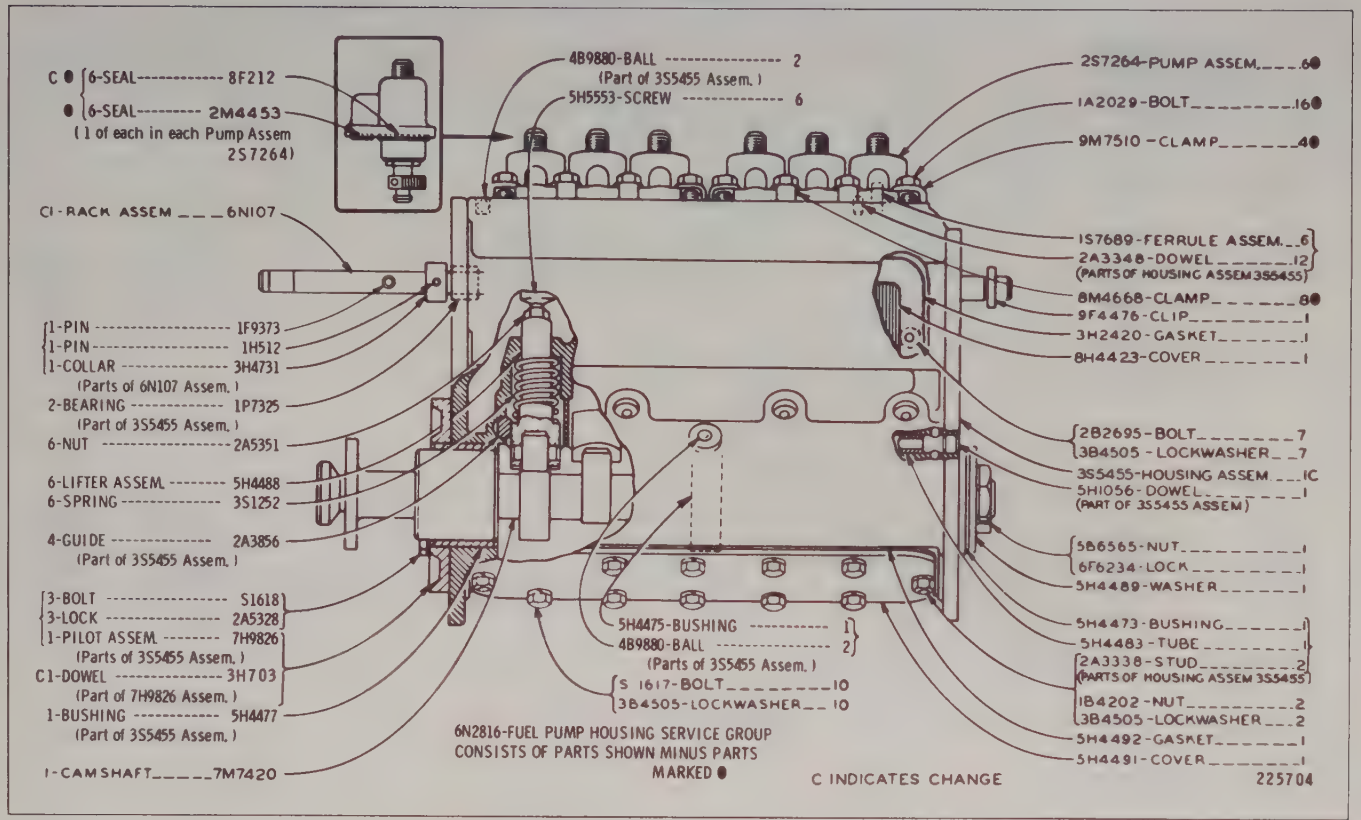


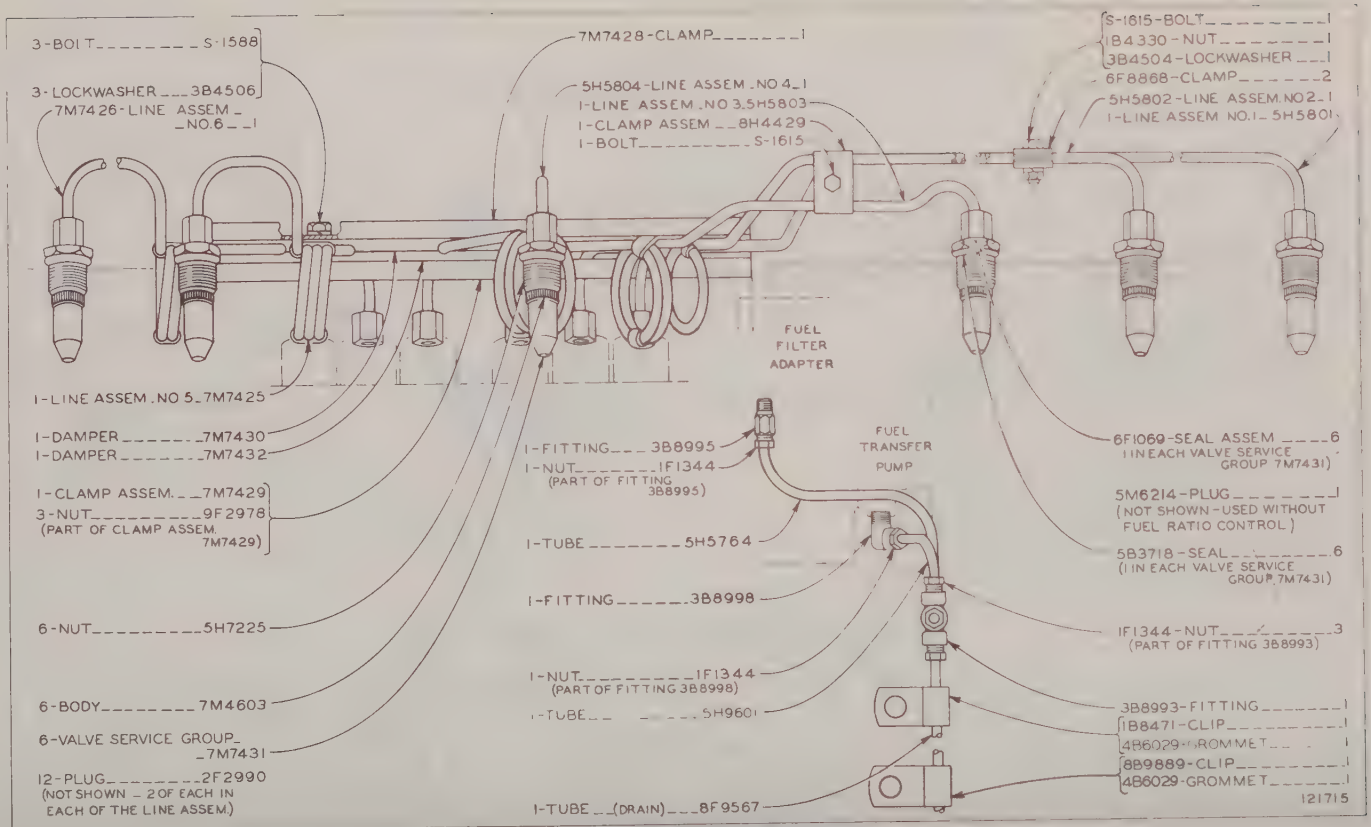
FUEL PUMP HOUSING
Serial No. 46B1558 to 46B2033 inclusive and 77B1 to 77B155 inclusive

3S5456 FUEL PUMP HOUSING GROUP
Serial No. 46B2034 to 46B5064 inclusive



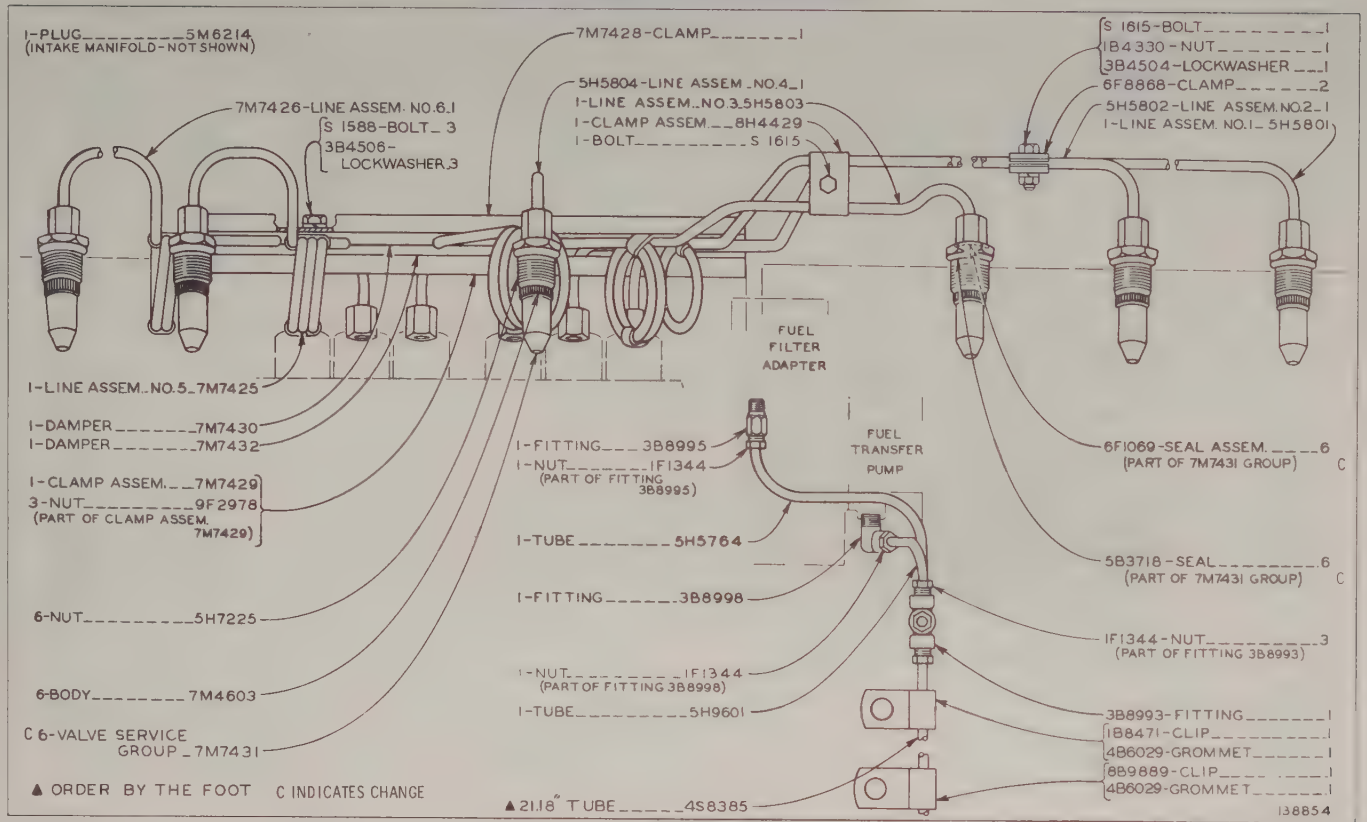
4N5111 FUEL PUMP HOUSING GROUP
Serial No. 46B5065—Up

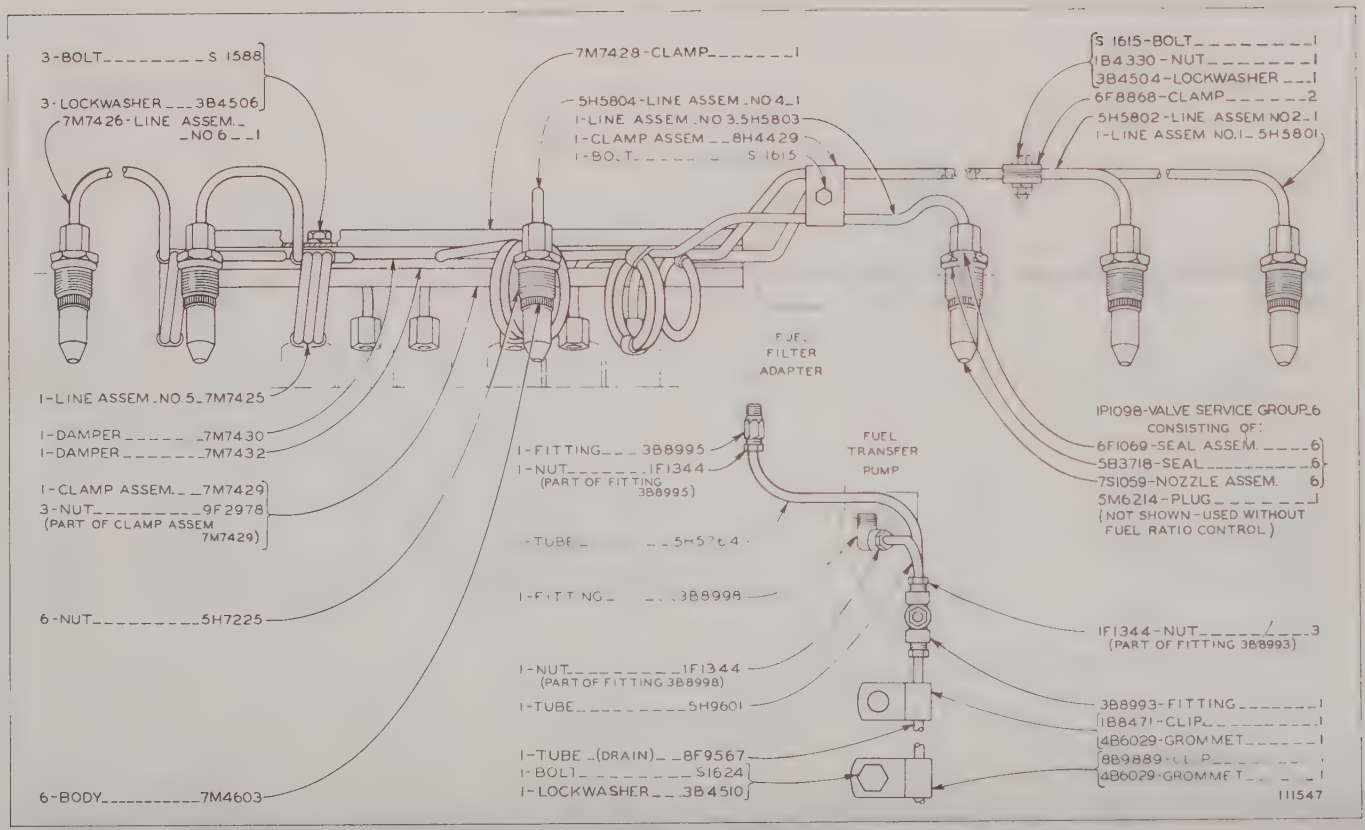




7M7423 FUEL INJECTION VALVES AND LINES GROUP—As Viewed from Right Hand Side of Engine
Serial No. 46B1558 to 46B2741 inclusive

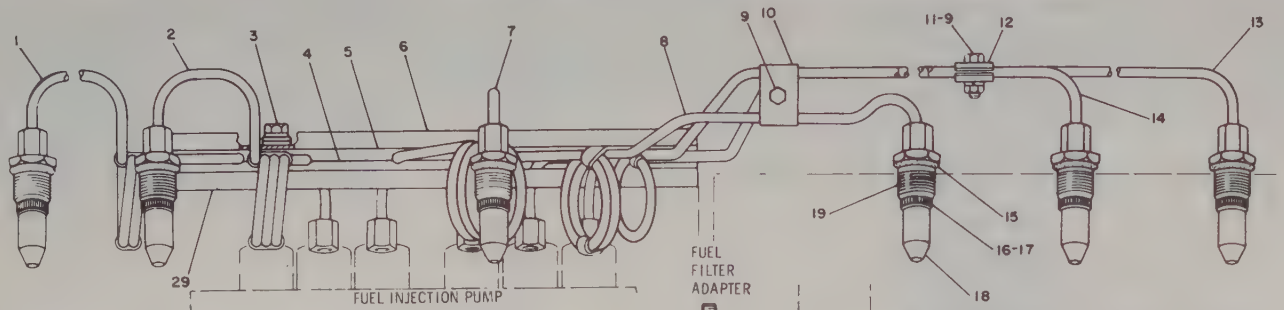
1N9848 FUEL INJECTION VALVES AND LINES GROUP—As Viewed from R.H. Side of Engine
Serial No. 46B2742 to 46B5064 inclusive

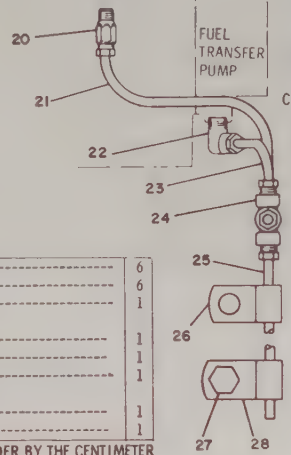




7M7423 FUEL INJECTION VALVES AND LINES GROUP—As Viewed from Right Hand Side of Engine
Serial No. 46B5065 to 46B7476 inclusive

7M7423 FUEL INJECTION VALVES AND LINES GROUP—As Viewed from Right Hand Side of Engine
Serial No. 46B7477 to 46B7814 inclusive





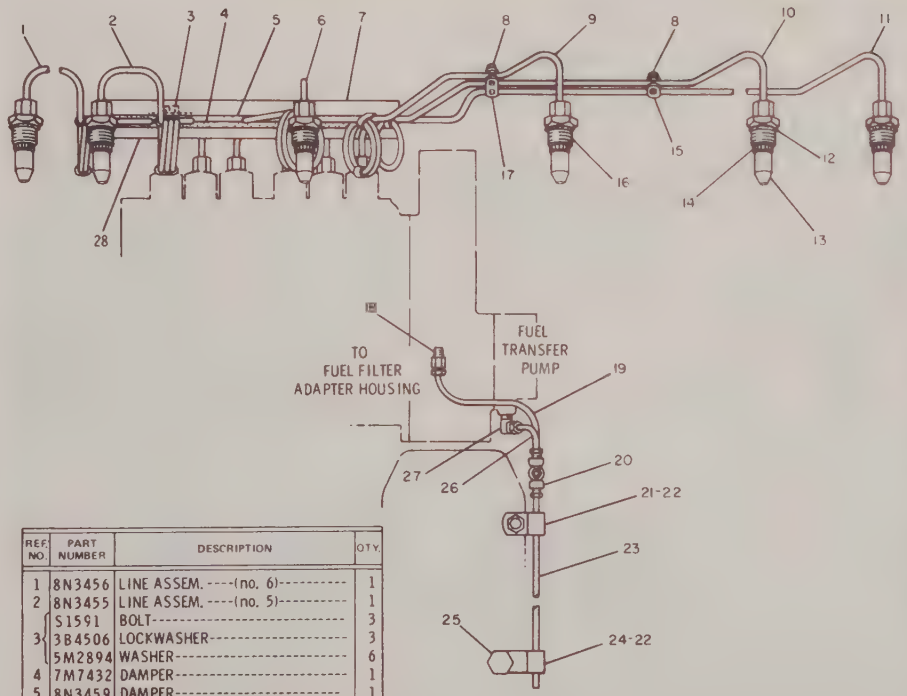
	REF NO	PART NUMBER	DESCRIPTION	QTY
	1	7M7426	LINE ASSEM.------(no. 6)--------	1
	2	7M7425	LINE ASSEM.------(no. 5)--------	1
C	3	S1591	BOLT----------	3
		3B4506	LOCKWASHER----------	3
C		5M2894	WASHER----------	6
	4	7M7432	DAMPER----------	1
	5	7M7430	DAMPER----------	1
	6	7M7428	CLAMP----------	1
	7	5H5804	LINE ASSEM.------(no. 4)--------	1
	8	5H5803	LINE ASSEM.------(no. 3)--------	1
	9	S1615	BOLT----------	2
	10	8H4429	CLAMP ASSEM.----------	1
	11	1B4330	NUT----------	1
		3B4504	LOCKWASHER----------	1
	12	6F8868	CLAMP----------	2
	13	5H5801	LINE ASSEM.------(no. 1)--------	1
	14	5H5802	LINE ASSEM.------(no. 2)--------	1
	15	5B3718	SEAL----------	6
	16	7M4603	BODY----------	6
	17	6F1069	SEAL ASSEM.----------	6

C	18	8N1831	NOZZLE ASSEM.----------	6
	19	5H7225	NUT----------	6
	20	3B8995	FITTING----------	1
			(Includes)	
		1F1344	NUT----------	1
	21	5H5764	TUBE----------	1
	22	3B8998	FITTING----------	1
			(Includes)	
		1F1344	NUT----------	1
	23	5H9601	TUBE----------	1

	24	3B8993	FITTING----------	1
			(Includes)	
		1F1344	NUT----------	3
C ●	25	5P1198	TUBE----------92 cm(3.62 in.)	
	26	1B8471	CLIP----------	1
		4B6029	GROMMET----------	1
	27	S1624	BOLT----------	1
		3B4510	LOCKWASHER----------	1
	28	8B9889	CLIP----------	1
		4B6029	GROMMET----------	1
	29	7M7429	CLAMP ASSEM.----------	1
			(Includes)	
		9F2978	NUT----------	3
▲		5M6214	PLUG----------	1
			(Use without Fuel Ratio Control)	

● ORDER BY THE CENTIMETER

▲ NOT SHOWN C INDICATES CHANGE 171033



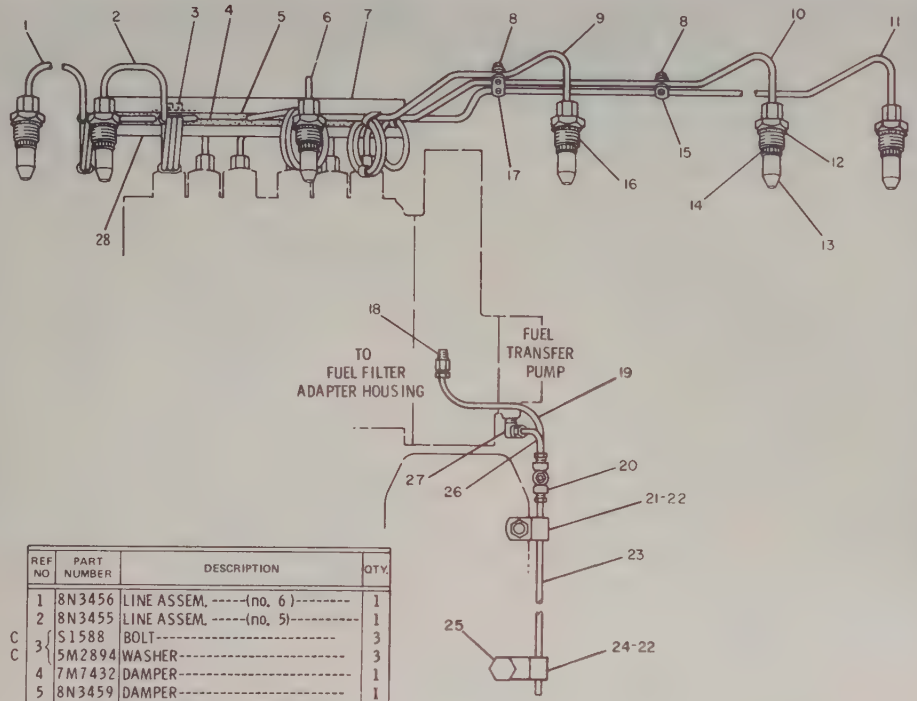
REF. NO.	PART NUMBER	DESCRIPTION	QTY.
1	8N3456	LINE ASSEM. ----(no. 6)----------	1
2	8N3455	LINE ASSEM. ----(no. 5)----------	1
3	S1591	BOLT----------	3
	3B4506	LOCKWASHER----------	3
	5M2894	WASHER----------	6
4	7M7432	DAMPER----------	1
5	8N3459	DAMPER----------	1
6	8N3454	LINE ASSEM. -----(no. 6)--------	1
7	7M7428	CLAMP----------	1
8	S1615	BOLT----------	3
	3B4504	LOCKWASHER----------	3
9	8N3453	LINE ASSEM. -----(no. 3)--------	1
10	8N3452	LINE ASSEM. -----(no. 2)--------	1
11	8N3451	LINE ASSEM. -----(no. 1)--------	1
12	5B3718	SEAL----------	6
13	8N1831	NOZZLE ASSEM. ----------	6
14	7M4603	BODY----------	6
	6F1069	SEAL----------	6
15	6N6403	CLAMP-------(tapped)----------	1
	6N6404	CLAMP----------	1
16	5H7225	NUT----------	6
17	6N5124	CLAMP-------(tapped)----------	1
	6N5125	CLAMP----------	1
18	3B8995	FITTING----------	1
		(Includes)	
	1F1344	NUT----------	1
19	5H5764	TUBE----------	1
20	3B8993	FITTING----------	1
		(Includes)	
	1F1344	NUT----------	1
21	1B8471	CLIP ----------	1
22	4B6029	GROMMET----------	2
▲ 23	5P1198	TUBE----------92 cm(36.33 in.)	
24	8B9889	CLIP----------	1
25	S1624	BOLT----------	1
	5P8246	WASHER----------	1
26	5H9601	TUBE----------	1
27	3B8998	FITTING----------	1
		(Includes)	
	1F1344	NUT----------	1
28	7M7429	CLAMP ASSEM. ----------	1
		(Includes)	
	9F2978	NUT----------	3
	5M6214	PLUG----------	1
		(Not Shown-To Cylinder Block)	

▲ ORDER BY THE CENTIMETER

224221

8N3460 FUEL INJECTION LINES GROUP
Serial No. 46B7814 to 46B8125 inclusive

8N3460 FUEL INJECTION LINES GROUP
Serial No. 46B8126—Up



REF NO	PART NUMBER	DESCRIPTION	QTY.
1	8N3456	LINE ASSEM. -----(no. 6)--------	1
2	8N3455	LINE ASSEM. -----(no. 5)----------	1
C 3	S1588	BOLT----------	3
C 3	5M2894	WASHER----------	3
4	7M7432	DAMPER----------	1
5	8N3459	DAMPER----------	1
6	8N3454	LINE ASSEM. -------(no. 4)-------	1
C 7	8N5236	CLAMP----------	1

8	S1615	BOLT----------	3
8	3B4504	LOCKWASHER----------	3
9	8N3453	LINE ASSEM. -----(no. 3)--------	1
10	8N3452	LINE ASSEM. -----(no. 2)--------	1
11	8N3451	LINE ASSEM. -----(no. 1)--------	1
12	5B3718	SEAL----------	6
13	8N1831	NOZZLE ASSEM. ----------	6
14	7M4603	BODY----------	6
14	6F1069	SEAL----------	6
15	6N6403	CLAMP-------(tapped)----------	1
15	6N6404	CLAMP----------	1
16	5H7225	NUT----------	6
17	6N5124	CLAMP-------(tapped)----------	1
17	6N5125	CLAMP----------	1
18	3B8995	FITTING----------	1
18		(Includes)	
18	1F1344	NUT----------	1
19	5H5764	TUBE----------	1
20	3B8993	FITTING----------	1
20		(Includes)	
20	1F1344	NUT----------	1
21	1B8471	CLIP----------	1
22	4B6029	GROMMET----------	2
▲ 23	5P1198	TUBE----------92 cm(36.33 in.)	
24	8B9889	CLIP----------	1
25	S1624	BOLT----------	1
25	5P8246	WASHER----------	1
26	5H9601	TUBE----------	1
27	3B8998	FITTING----------	1
27		(Includes)	
27	1F1344	NUT----------	1
28	7M7429	CLAMP ASSEM. ----------	1
28		(Includes)	
28	9F2978	NUT----------	3
	5M6214	PLUG----------	1
		(Not Shown-To Cylinder Block)	

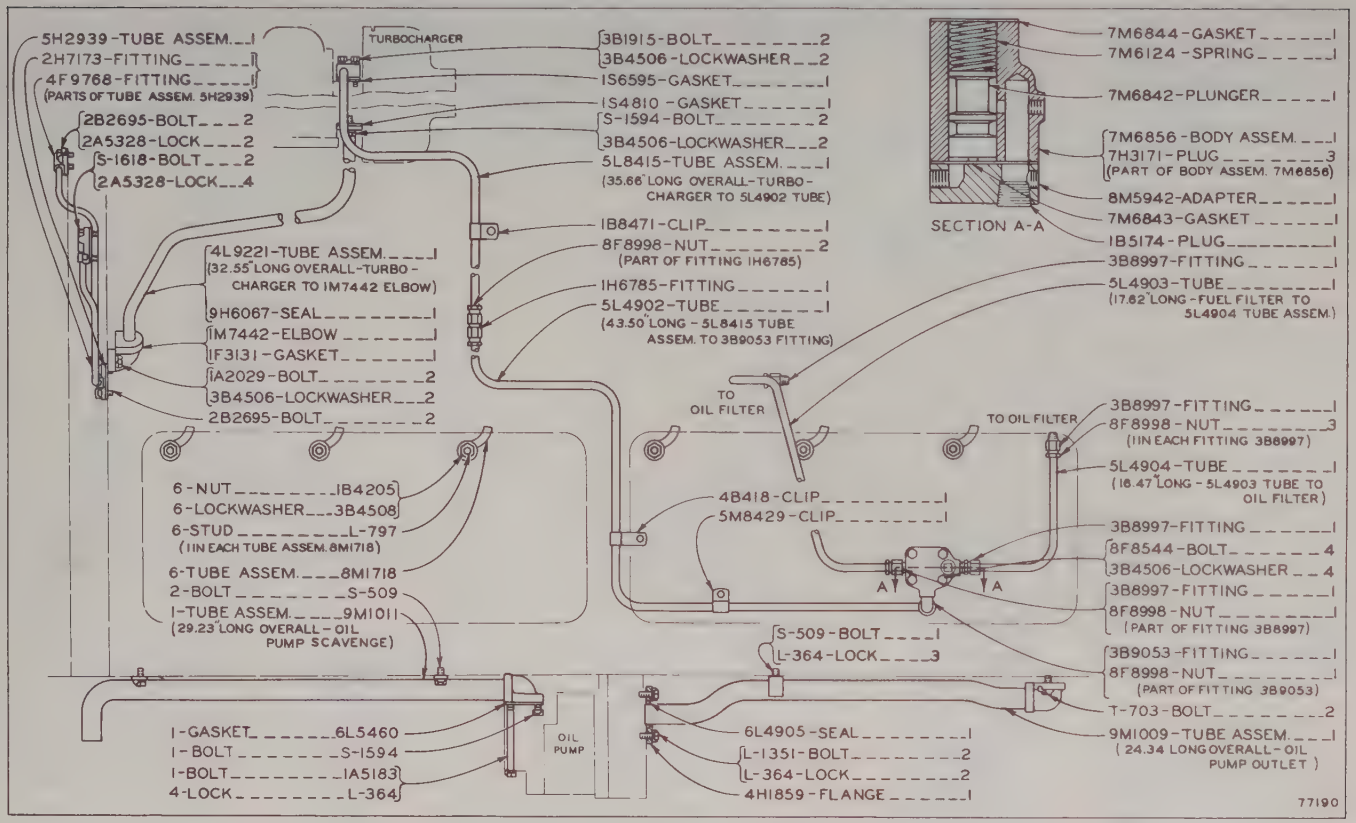
C INDICATES CHANGE

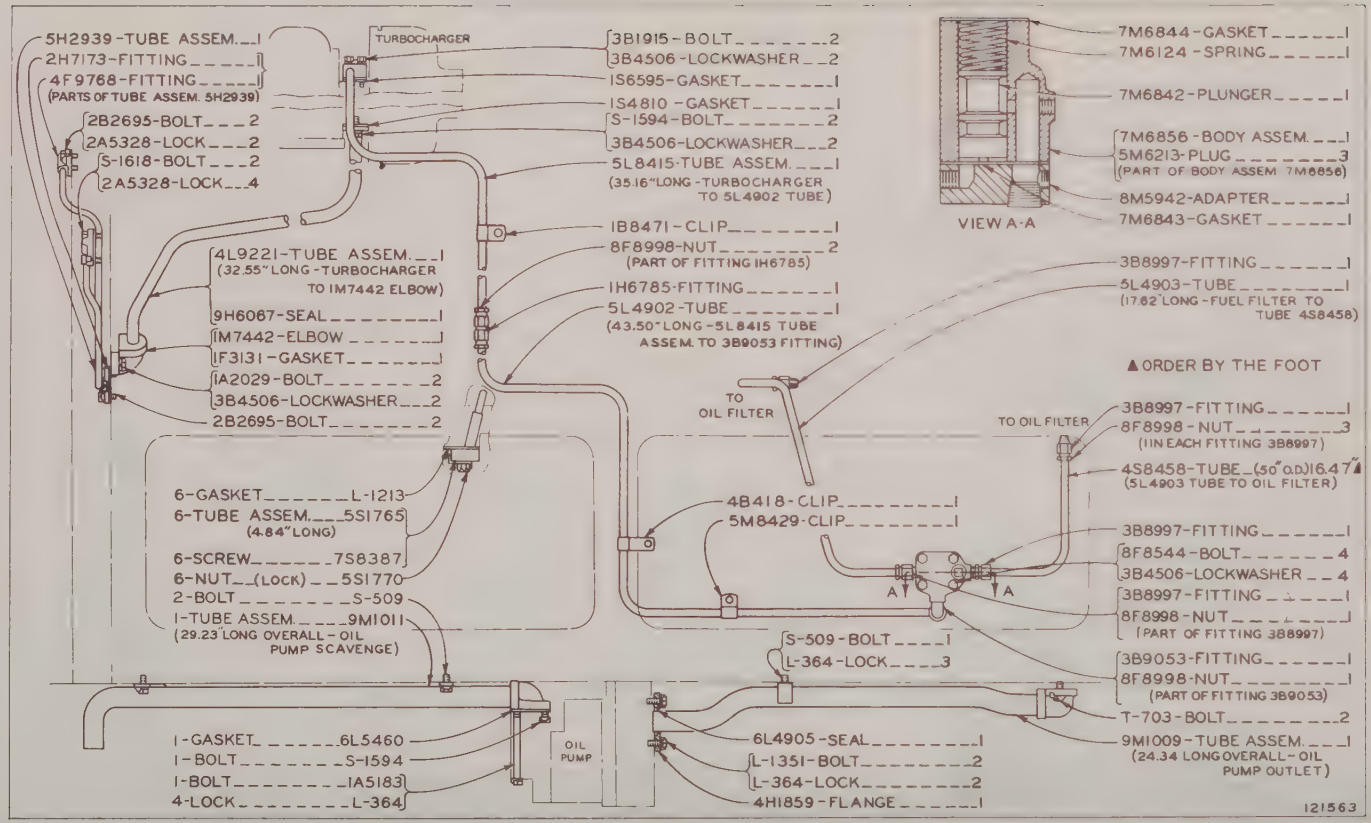
▲ ORDER BY THE CENTIMETER

174390

OIL LINES--AS VIEWED FROM RIGHT HAND SIDE OF ENGINE

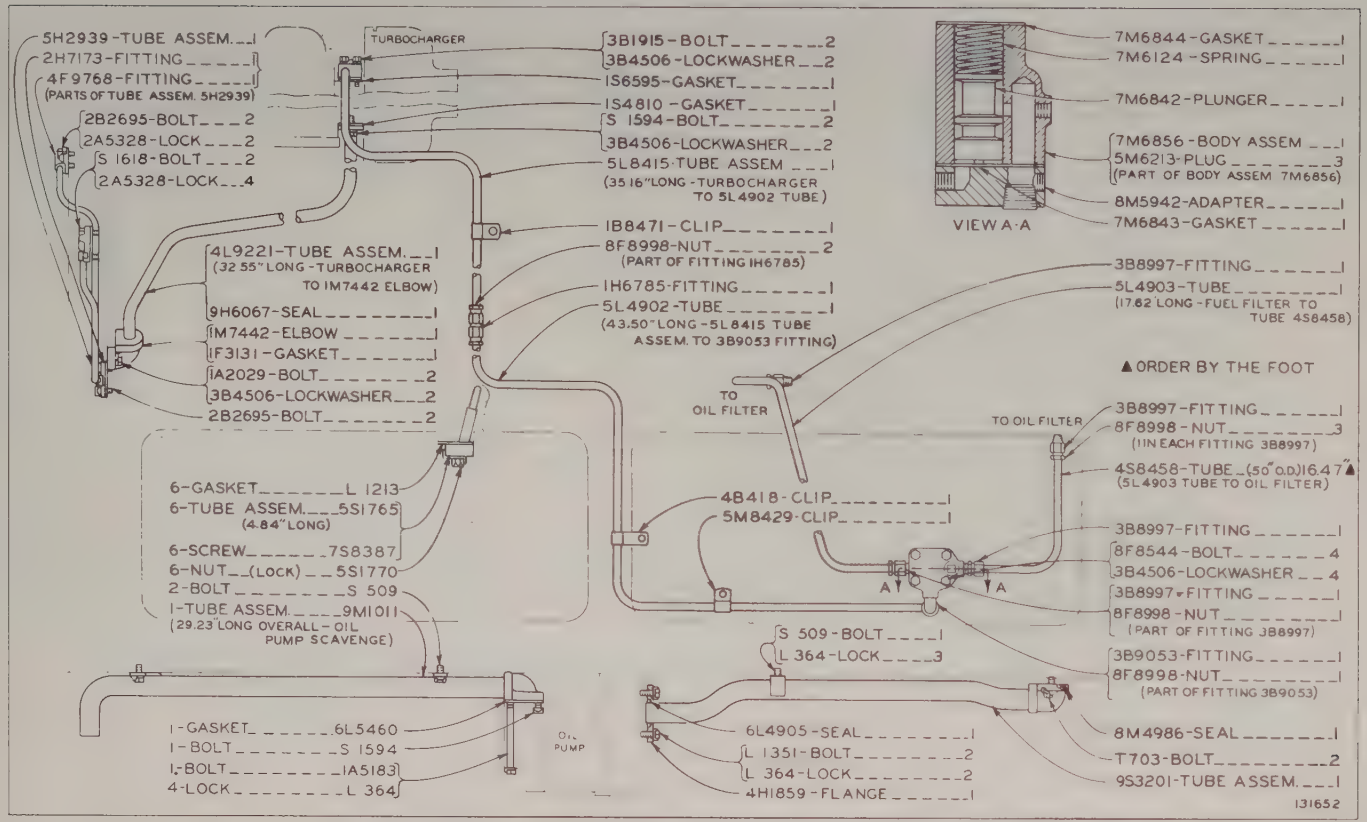
SERIAL No. 46B1558 TO 46B2275 INCLUSIVE AND 77B1 TO 77B235 INCLUSIVE



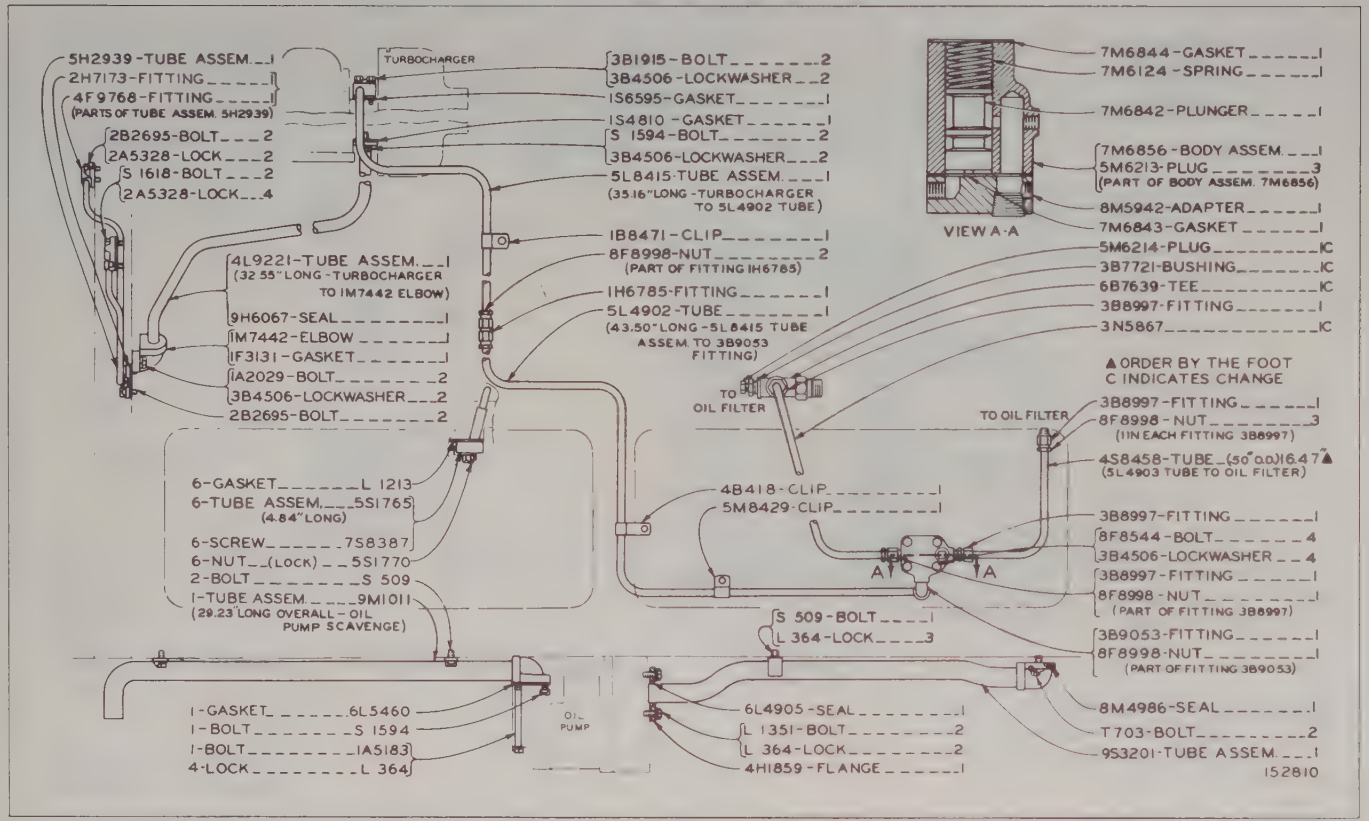


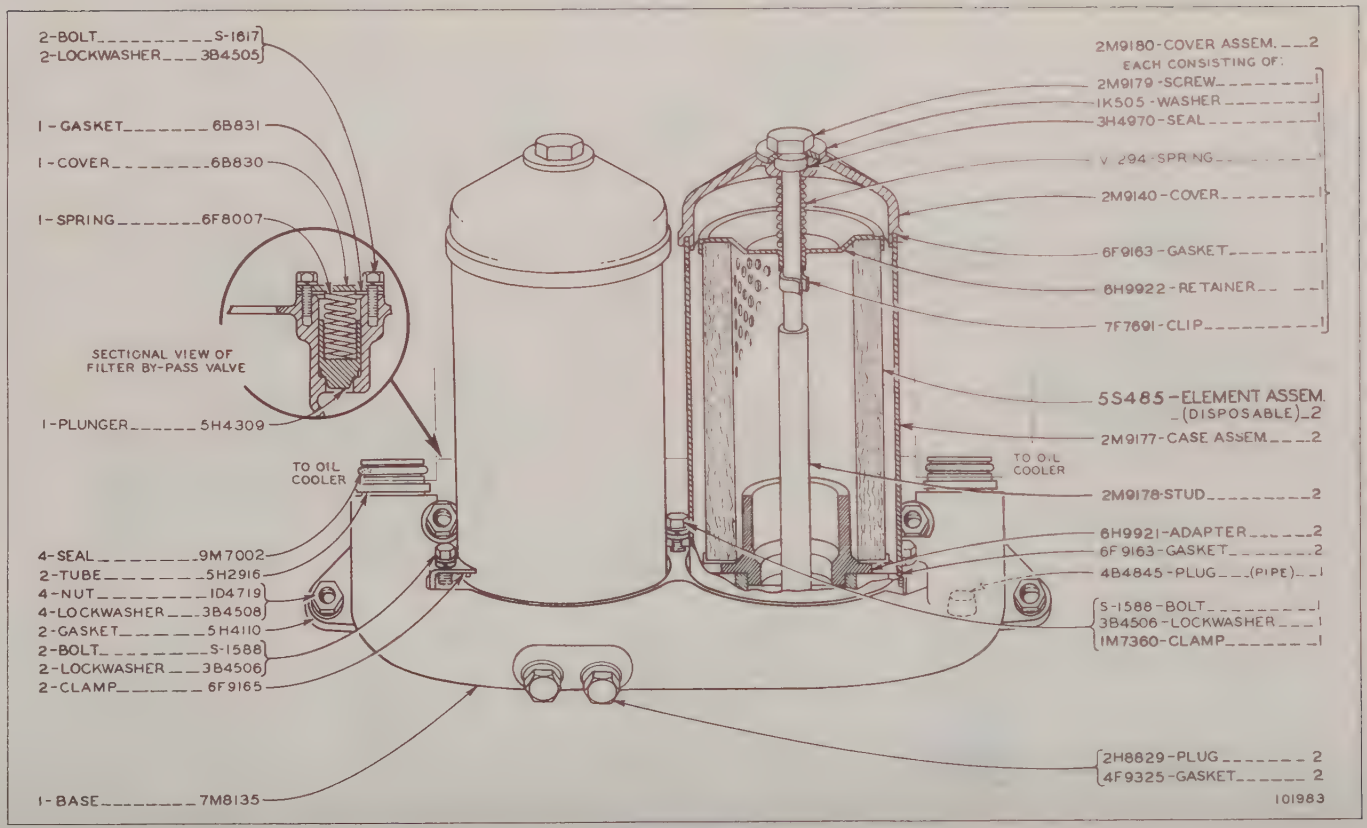
7L5467 OIL LINES GROUP—As Viewed from R.H. Side of Frame
Serial No. 46B2276 to 46B3465 inclusive and 77B236—Up

7L5467 OIL LINES GROUP—As Viewed from R.H. Side of Engine
Serial No. 46B3466 to 46B5064 inclusive



7L5467 OIL LINES GROUP—As Viewed from R.H. Side of Engine
Serial No. 46B5065—Up

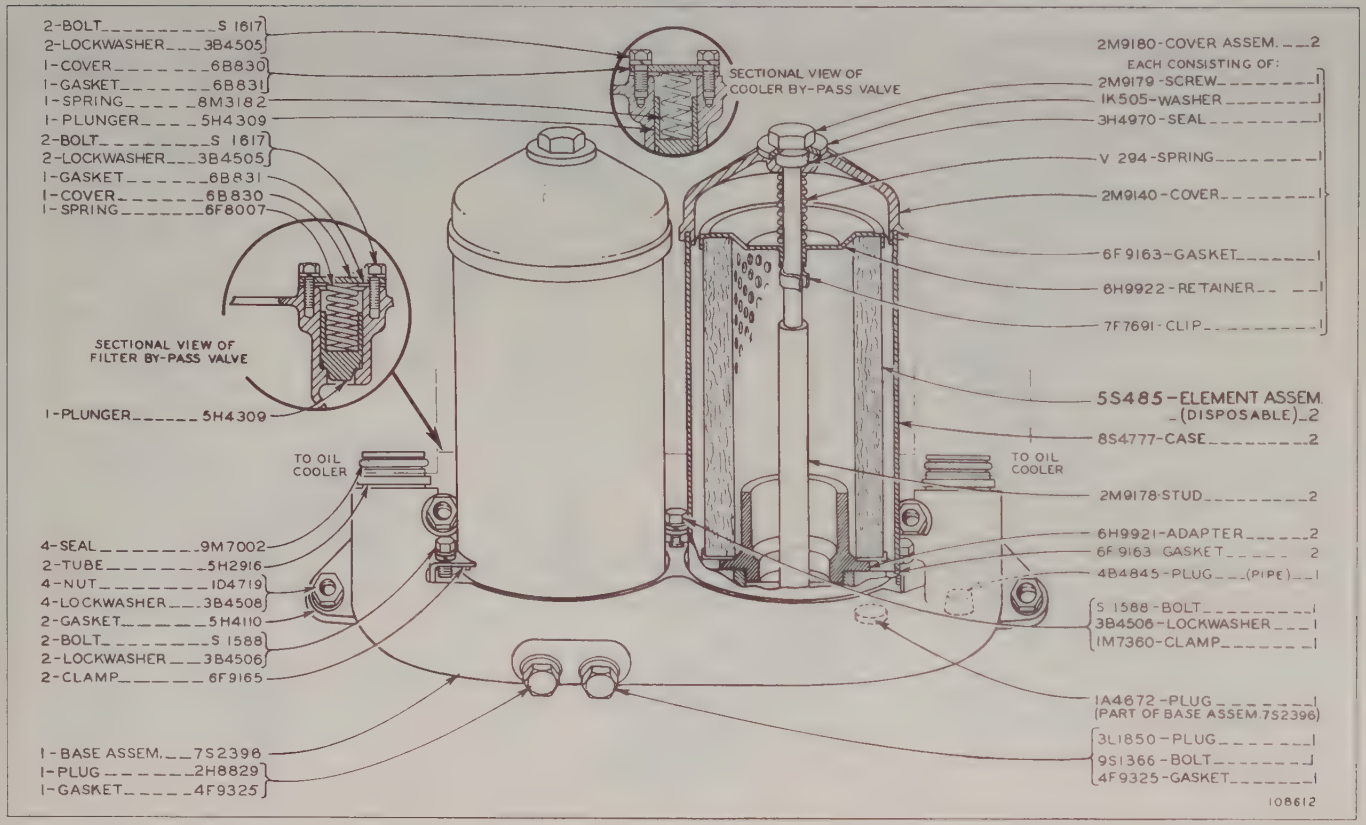


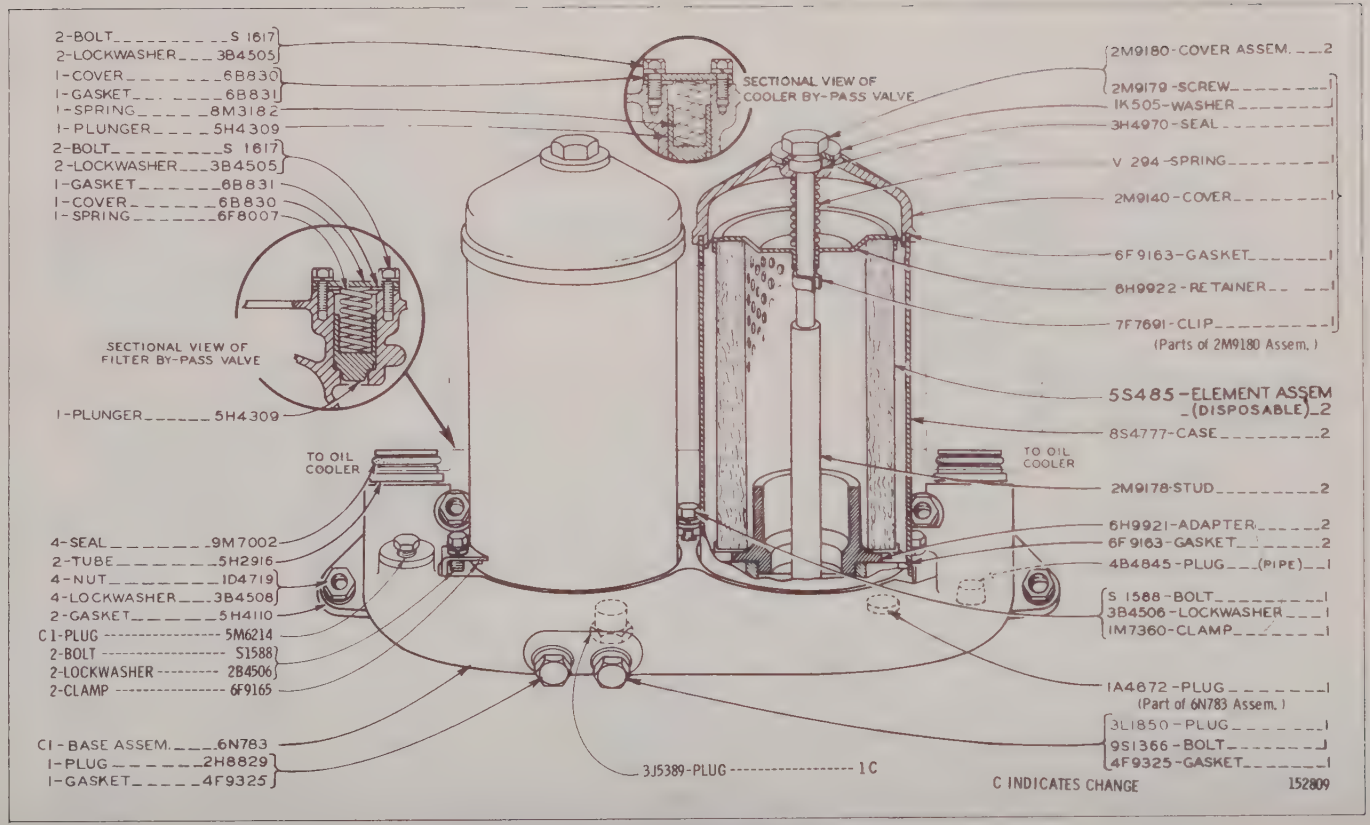


OIL FILTER

Serial No. 46B1558 to 46B2449 inclusive and 77B1 to 77B317 inclusive

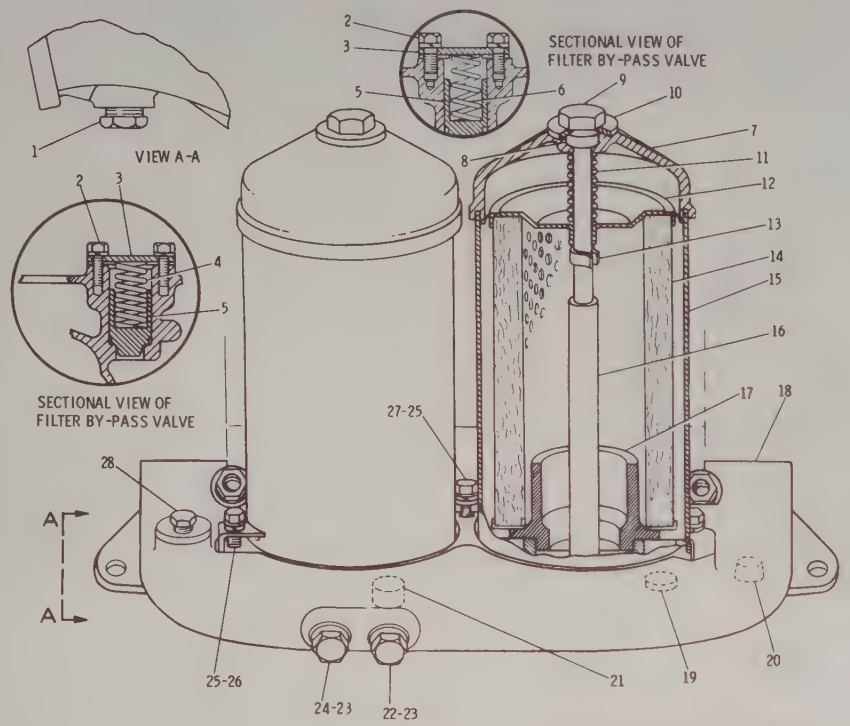
5H1113 OIL FILTER GROUP
Serial No. 46B2450 to 46B5063 inclusive and 77B318—Up





5H1113 OIL FILTER GROUP
Serial No. 46B5064 to 46B6421 inclusive

5H1113 OIL FILTER GROUP
Serial No. 46B6422—Up
Part of 7N1767 Oil Filter Group shown on Page 44A-4

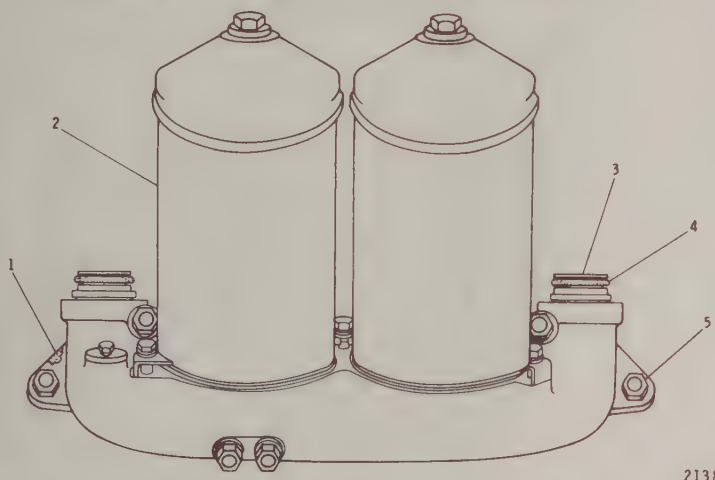


REF NO	PART NUMBER	DESCRIPTION	QTY
1	3J5389	PLUG	1
2	S1617	BOLT	4
	3B4505	LOCKWASHER	4
3	6B830	COVER	2
	6B831	GASKET	2
4	6F8007	SPRING	1
5	5H4309	PLUNGER	2
6	8M3182	SPRING	1
7	2M9180	COVER ASSEM.	2
		(Each Includes)	
	2M9140	COVER	1
	6F9163	GASKET	1
8	3H4970	SEAL	1
9	2M9179	SCREW	1
10	1K505	WASHER	1
11	V294	SPRING	1
12	6H9922	RETAINER	1
13	7F7691	CLIP	1
14	5S485	ELEMENT ASSEM.	2
15	8S4777	CASE	2
	6F9163	GASKET	2
16	2M9178	STUD	2
17	6H9921	ADAPTER	2
18	6N783	BASE ASSEM.	1
		(Includes)	
19	1A4672	PLUG	1
▲ 20	4B4845	PLUG (pipe)	1
21	3L1850	PLUG	1
22	9S1366	BOLT	1
23	4F9325	GASKET	2
24	2H8829	PLUG	1
25	S1588	BOLT	3
	3B4506	LOCKWASHER	3
26	6F9165	CLAMP	2
27	1M7360	CLAMP	1
28	5M6214	PLUG	1

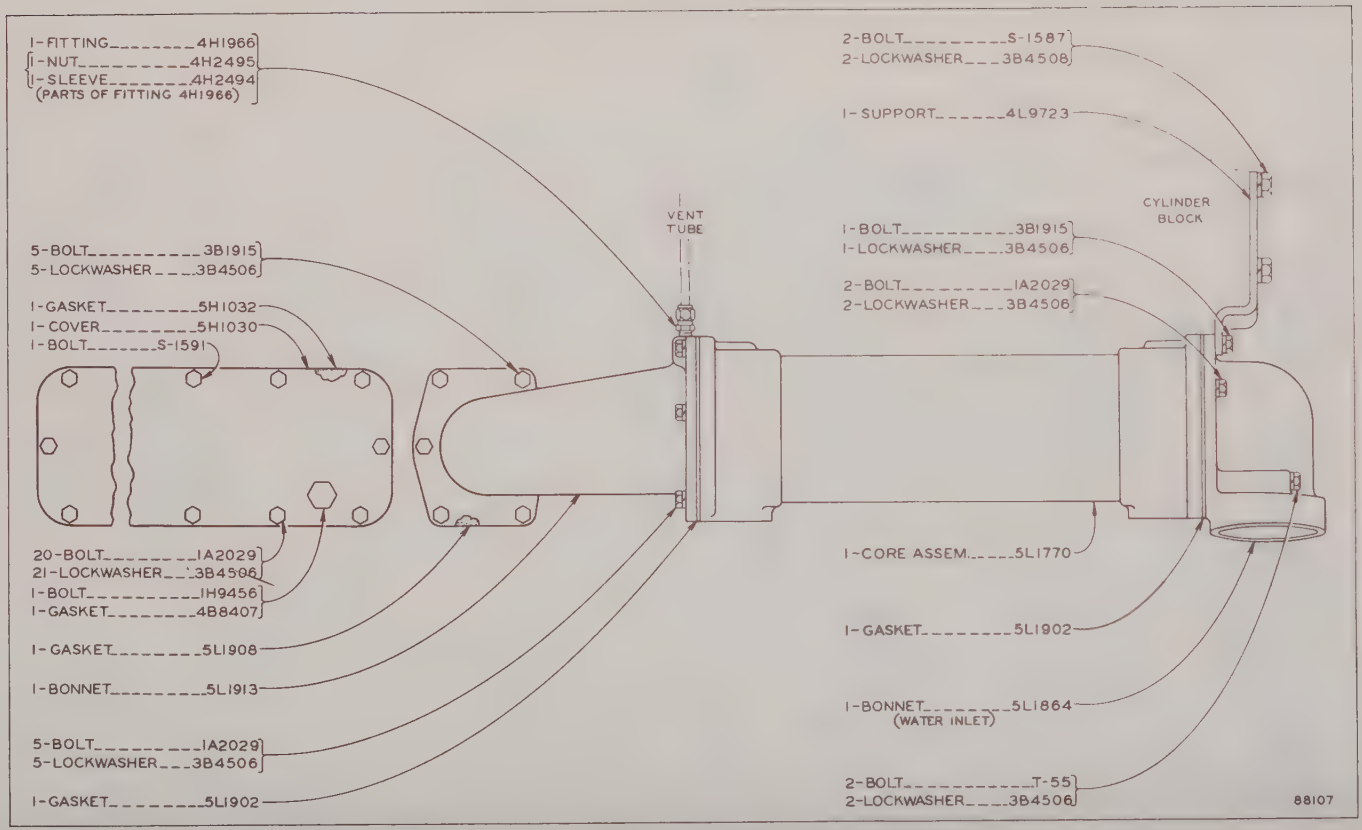
▲ NOT PART OF 5H1113 OIL FILTER GROUP

213876

REF. NO	PART NUMBER	DESCRIPTION	QTY
1	5H4110	GASKET	2
2	5H1113	FILTER GROUP (Separate Illustration)	1
3	5H2916	TUBE	2
4	9M7002	SEAL	4
5	1D4719	NUT	4

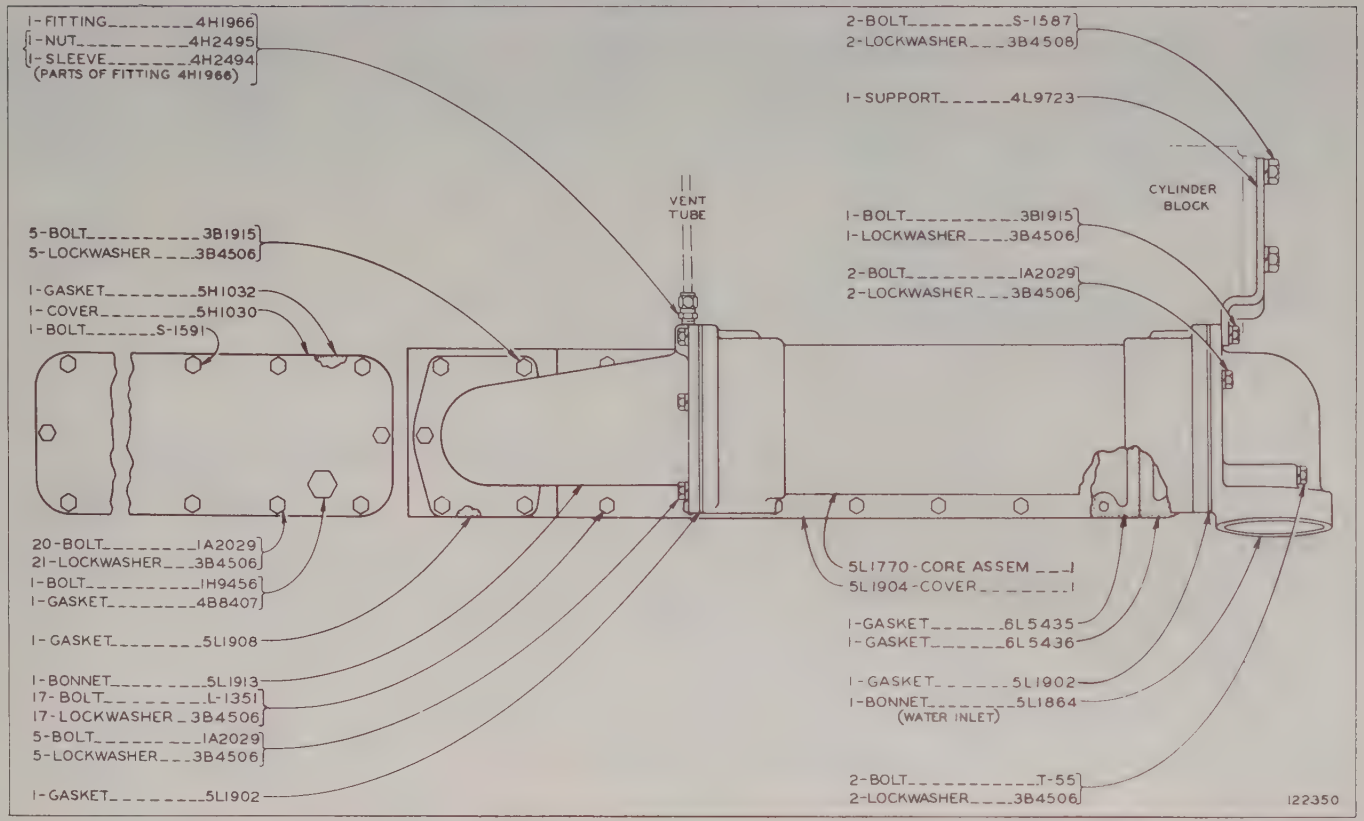


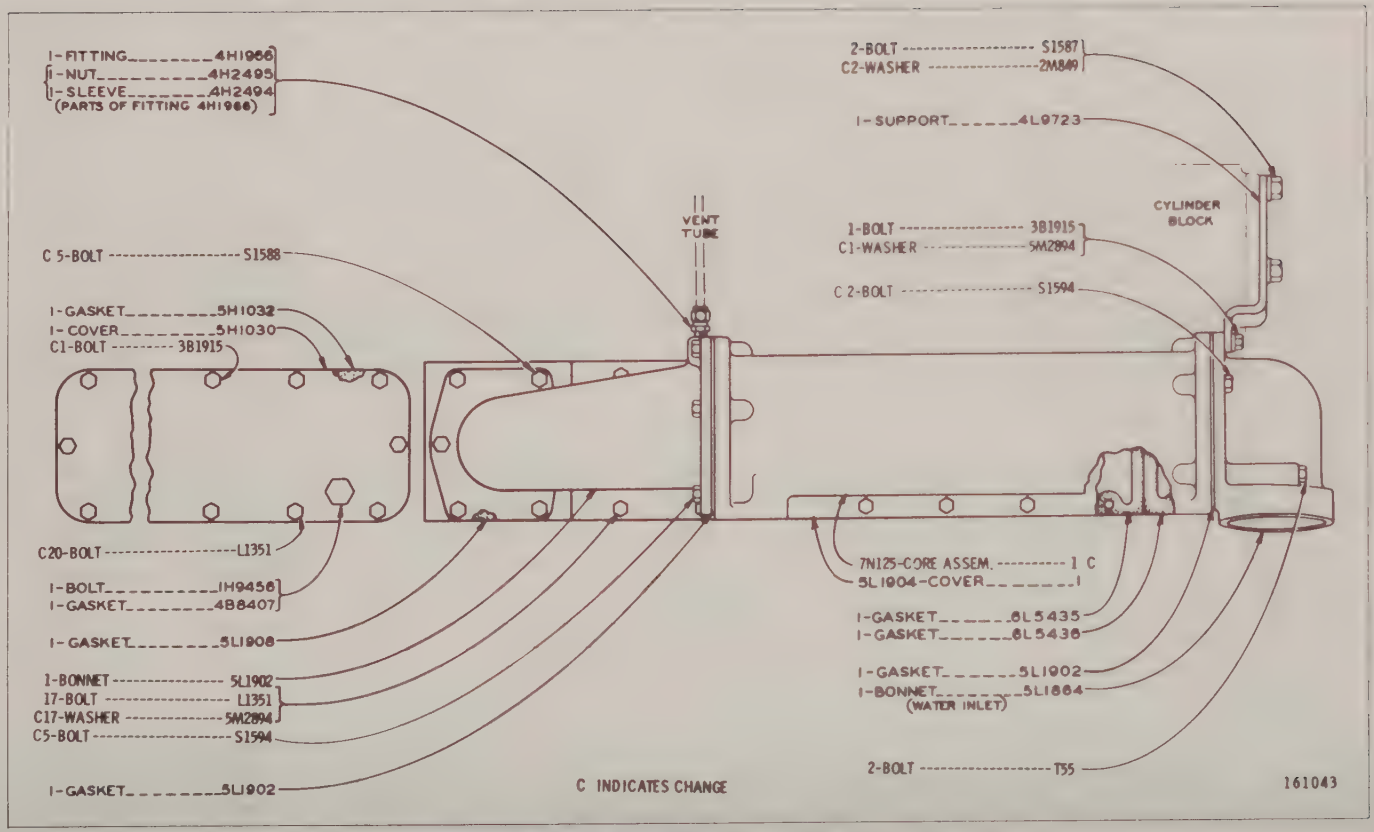
7N1767 OIL FILTER GROUP
Serial No. 46B6422—Up
5H1113 Filter parts are shown on Page 44A-2



OIL COOLER—As Viewed from Right Hand Side of Engine
Serial No. 46B1558 to 46B2410 inclusive and 77B1 to 77B292 inclusive

4L8627 OIL COOLER GROUP—As Viewed from R.H. Side of Engine—Type 1
Serial No. 46B2411 to 46B6461 inclusive and 77B293—Up

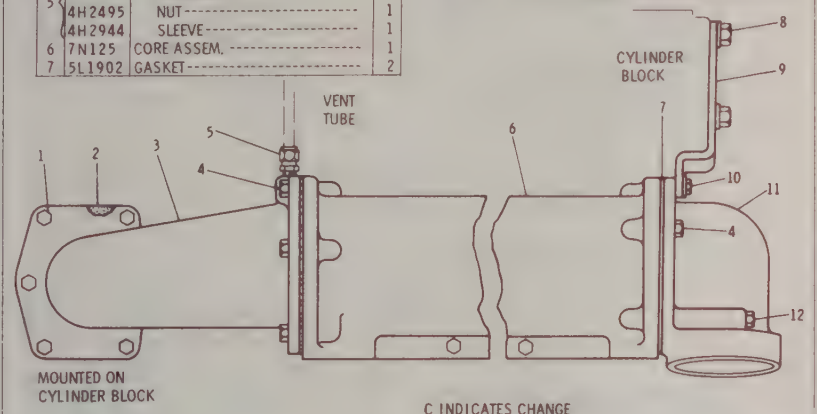




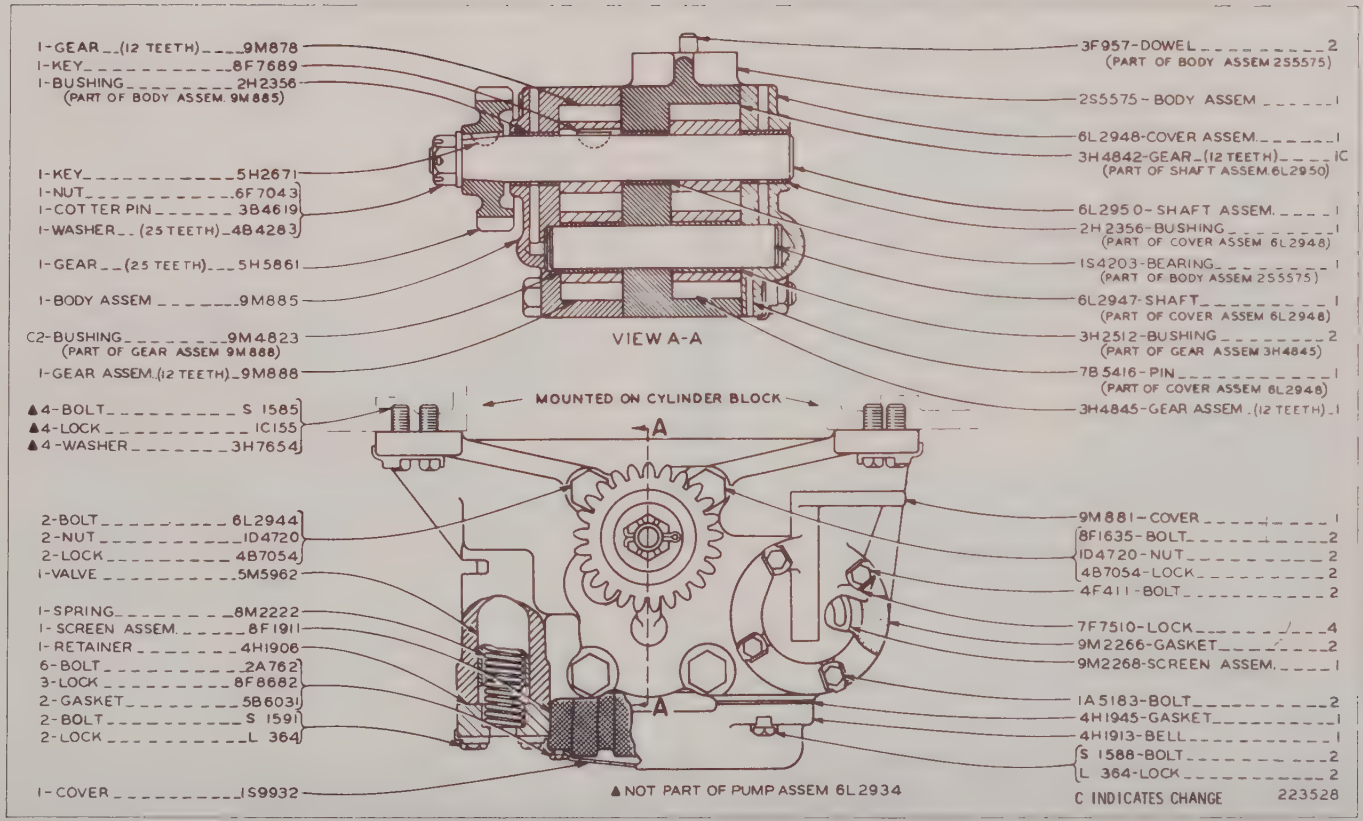
4L8627 OIL COOLER GROUP—As Viewed from R.H. Side of Engine—Type 2
Serial No. 46B2411 to 46B6421 inclusive and Serial No. 77B293—Up

REF. NO	PART NUMBER	DESCRIPTION	QTY
1	S1588	BOLT	5
2	5L1908	GASKET	1
3	5L1913	BONNET	1
4	S1594	BOLT	7
5	4H1966	FITTING (Includes)	1
	4H2495	NUT	1
	4H2944	SLEEVE	1
6	7N125	CORE ASSEM.	1
7	5L1902	GASKET	2

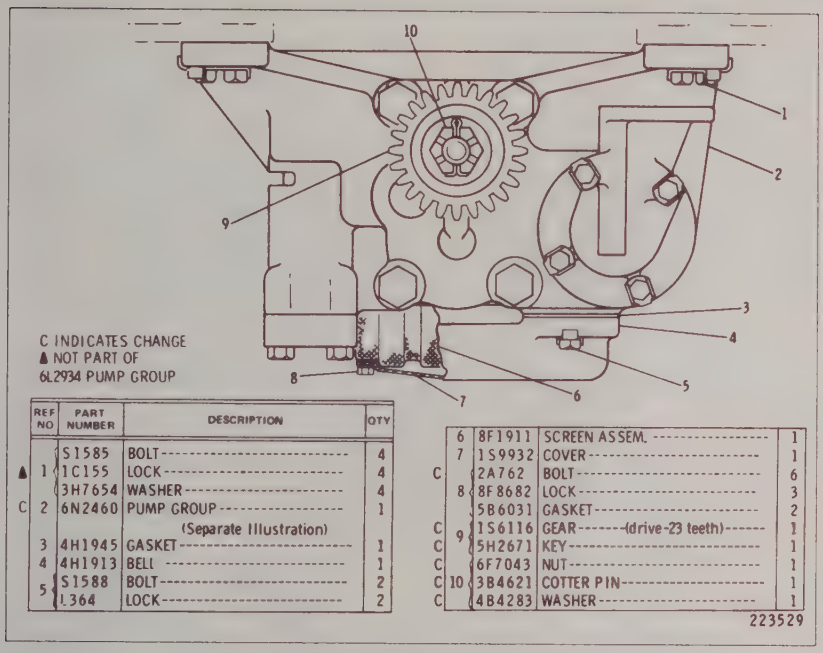
	REF. NO	PART NUMBER	DESCRIPTION	QTY
	8	S1587	BOLT	2
		2M849	WASHER	2
	9	4L9723	SUPPORT	1
C	10	3B1915	BOLT	1
C		5M2894	WASHER	1
	11	5L1864	BONNET	1
	12	T55	BOLT	2



4L8627 OIL COOLER GROUP—As Viewed from R.H. Side of Engine
Serial No. 46B6422—Up



6L2934 OIL PUMP GROUP (6L2543 N/S)
Serial No. 46B1558 to 46B5288 inclusive

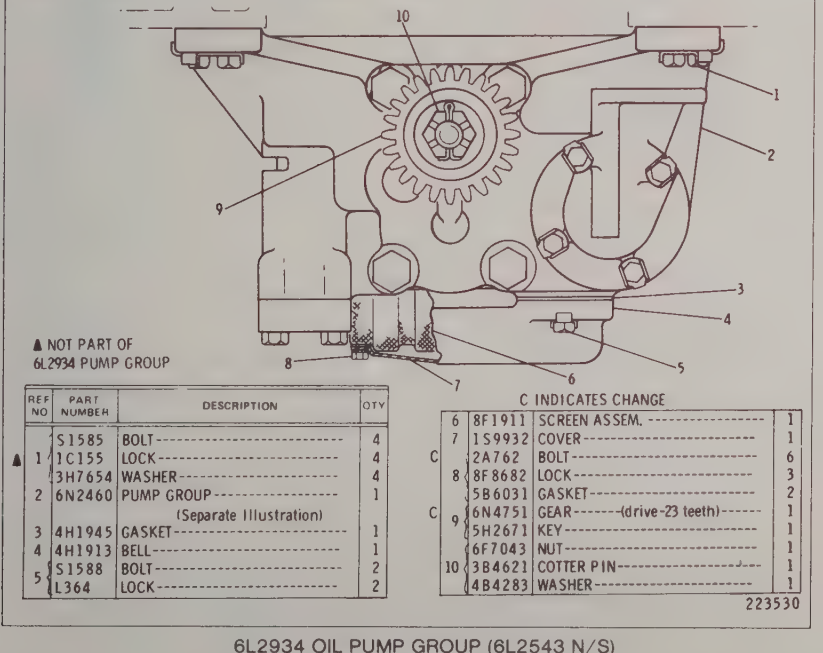


C INDICATES CHANGE
▲ NOT PART OF 6L2934 PUMP GROUP

REF NO	PART NUMBER	DESCRIPTION	QTY
	S1585	BOLT	4
▲ 1	1C155	LOCK	4
	3H7654	WASHER	4
C 2	6N2460	PUMP GROUP	1
		(Separate Illustration)	
3	4H1945	GASKET	1
4	4H1913	BELL	1
5	S1588	BOLT	2
	L364	LOCK	2
6	8F1911	SCREEN ASSEM.	1
7	1S9932	COVER	1
C	2A762	BOLT	6
8	8F8682	LOCK	3
	5B6031	GASKET	2
C 9	1S6116	GEAR (drive-23 teeth)	1
C	5H2671	KEY	1
C	6F7043	NUT	1
C 10	3B4621	COTTER PIN	1
C	4B4283	WASHER	1

223529

6L2934 OIL PUMP GROUP (6L2543 N/S)
Serial No. 46B5289 to 46B5614 inclusive
6N2460 Pump parts are shown on Page 46C



▲ NOT PART OF 6L2934 PUMP GROUP

REF NO	PART NUMBER	DESCRIPTION	QTY
	S1585	BOLT	4
▲ 1	1C155	LOCK	4
	3H7654	WASHER	4
2	6N2460	PUMP GROUP	1
		(Separate Illustration)	
3	4H1945	GASKET	1
4	4H1913	BELL	1
5	S1588	BOLT	2
	L364	LOCK	2

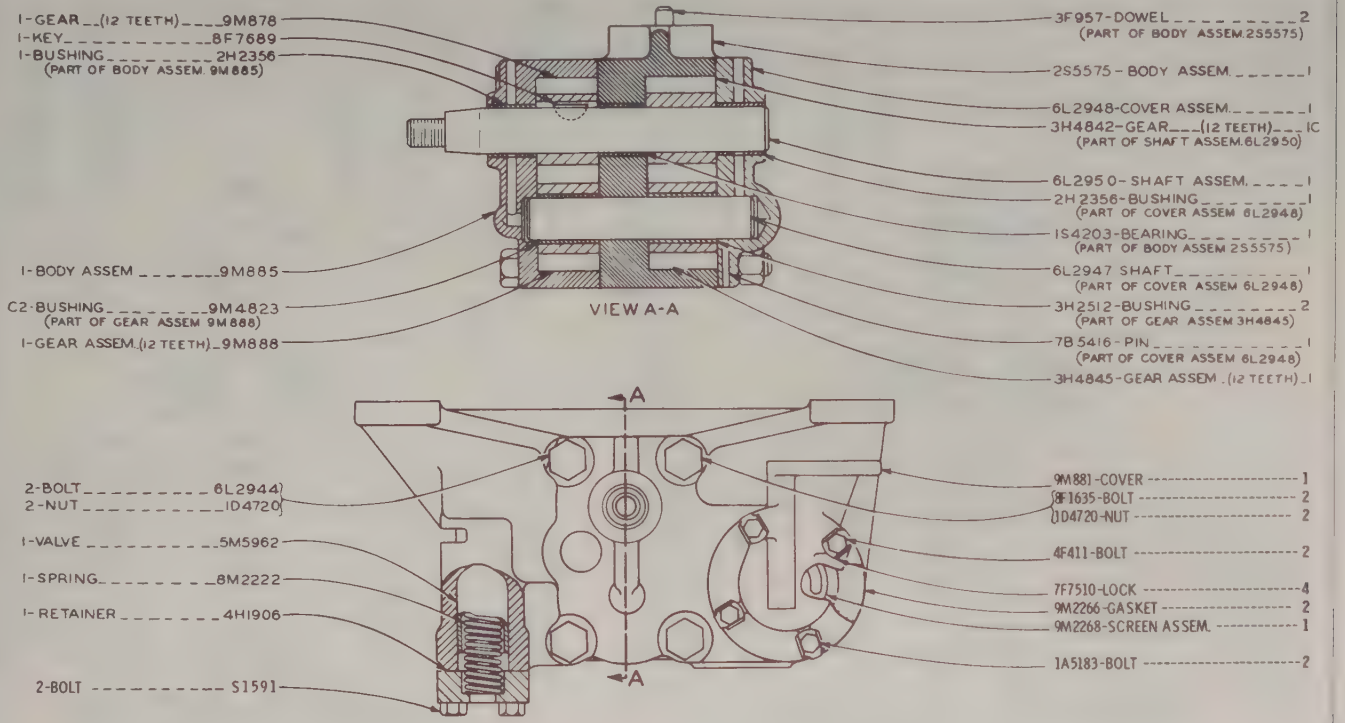
C INDICATES CHANGE

6	8F1911	SCREEN ASSEM.	1
7	1S9932	COVER	1
C	2A762	BOLT	6
8	8F8682	LOCK	3
	5B6031	GASKET	2
C 9	6N4751	GEAR (drive-23 teeth)	1
	5H2671	KEY	1
	6F7043	NUT	1
10	3B4621	COTTER PIN	1
	4B4283	WASHER	1

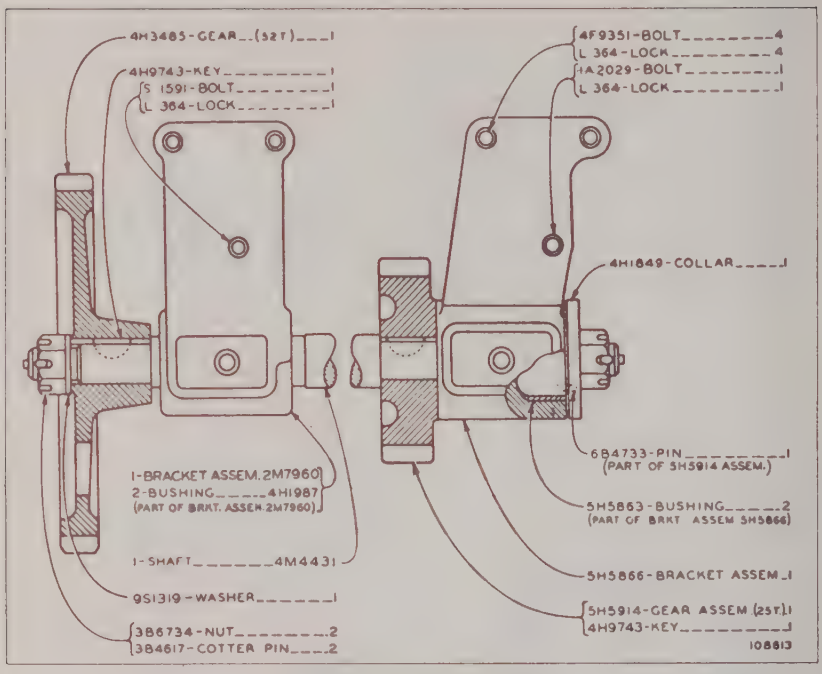
223530

6L2934 OIL PUMP GROUP (6L2543 N/S)
Serial No. 46B5615—Up
6N2460 Pump parts are shown on Page 46C

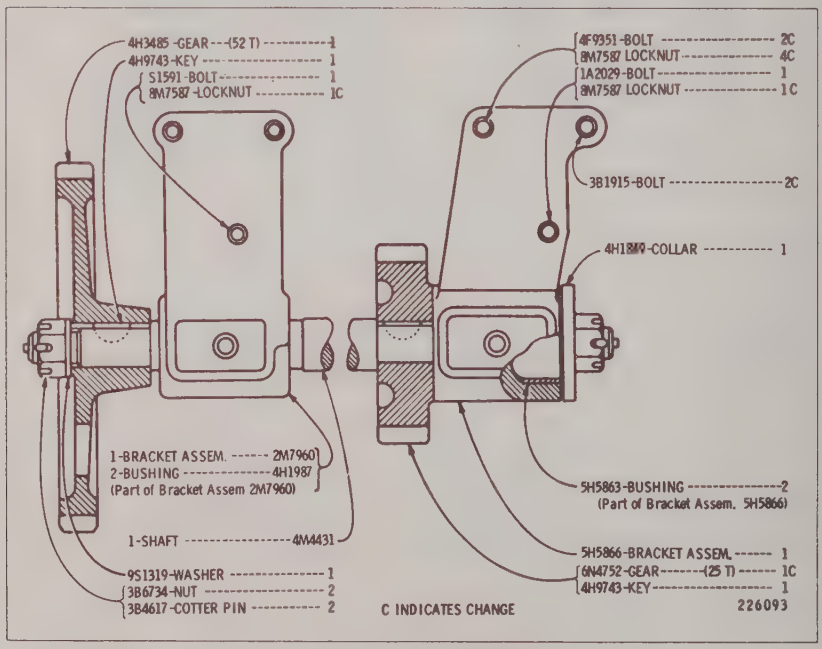
6N2460 OIL PUMP GROUP—Double Section
Serial No. 46B5289—Up
Part of 6L2934 Oil Pump Group shown on Page 46A



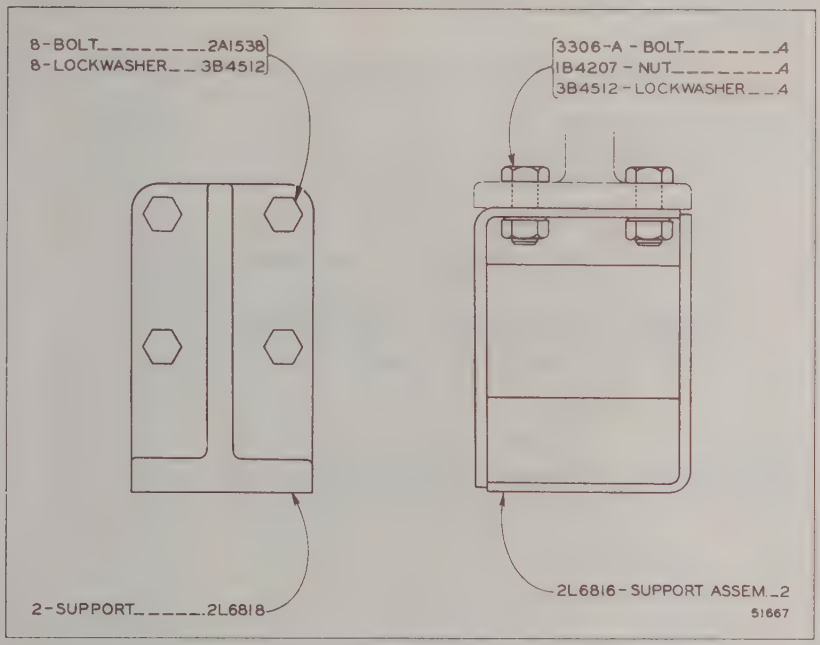
C INDICATES CHANGE 223570



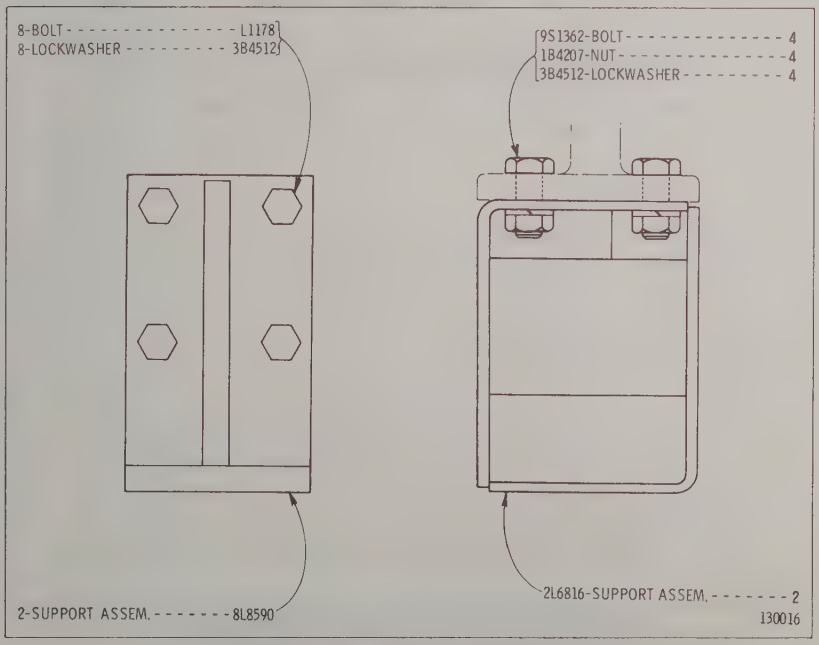
5H1429 OIL PUMP DRIVE GROUP
Serial No. 46B1558 to 46B5614 inclusive



5H1429 OIL PUMP DRIVE GROUP
Serial No. 46B5615—Up



2L3516 ENGINE SUPPORT GROUP
Serial No. 46B1558 to 3371, 3387, 3389, 3390, 3391 & 46B3401 inclusive



2L3516 ENGINE SUPPORT GROUP
Serial No. 46B3372 to 3386, 3388, 3392 to 3400 & 46B3402—Up

Complete Gasoline Starting Engine Arrangement

Consists of:			Page
1	2L9069	Compression Release Control Group	51
1	6L2579	Fuel System Group	56
1	6L2583	Starting Engine and Transmission Arrangement	Listed below
1	6L2589	Starting Engine Installation Group	49
1	9M7895	Water Lines Group	51

6L2583 Starting Engine and Transmission Arrangement

Part of Complete Gasoline Starting Engine Arrangement

Consists of:

1	.....	Basic Starting Engine Arrangement	Listed below
1	9H4826	Clutch Group	61
1	6L2538	Transmission and Starter Pinion Group	62

Basic Starting Engine Arrangement

Part of 6L2583 Starting Engine and Transmission Arrangement

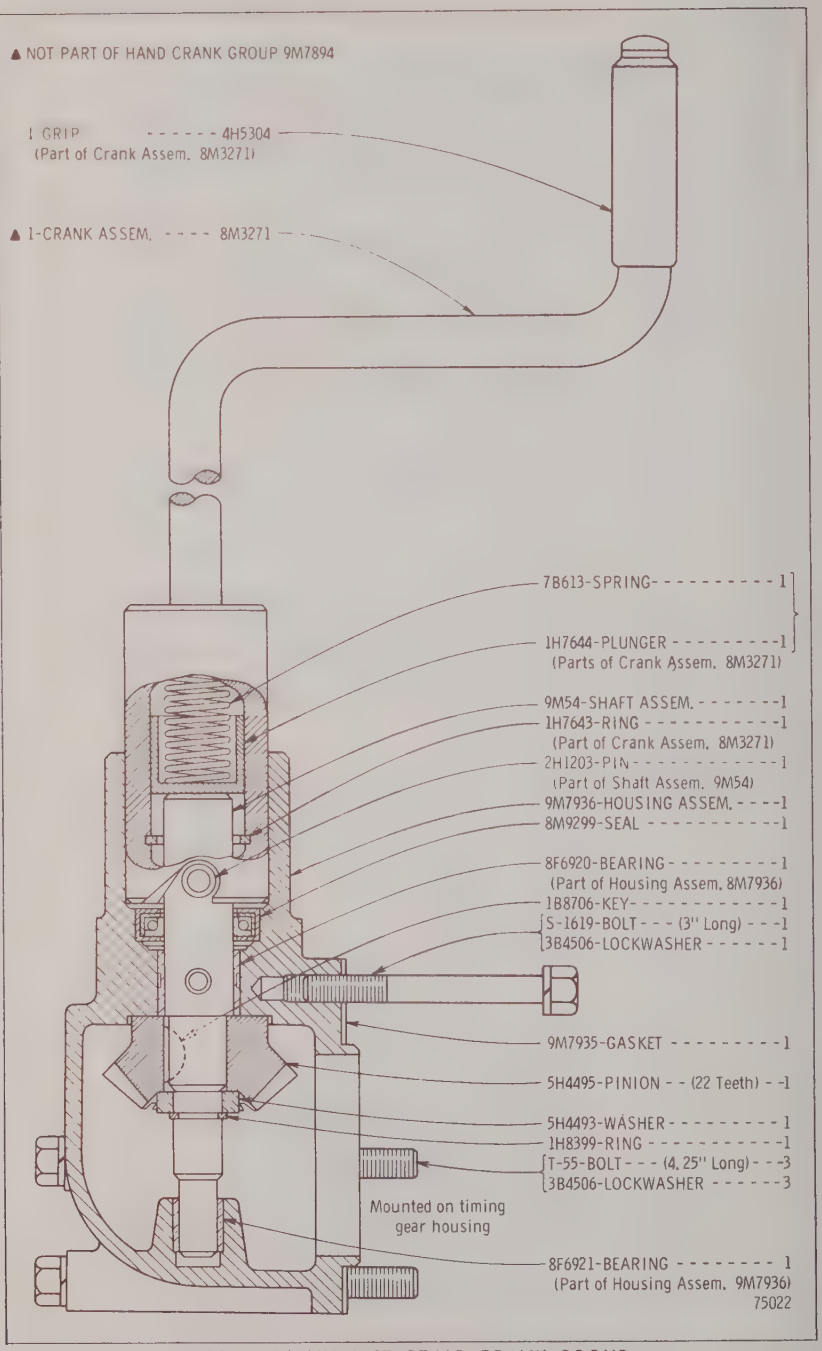
Consists of:

1	.....	Camshaft and Governor	55
2	.....	Connecting Rod and Piston	54
1	.....	Crankshaft	54
1	.....	Cylinder Block, Cylinder Head and Valve Mechanism	52
1	4L4471	Ignition System Group	58
1	6L2529	Carburetor and Air Transfer Pipe Group	57
1	9M1713	Oil Pump Assembly	56
1	9M7894	Manual Starting Crank Group	50

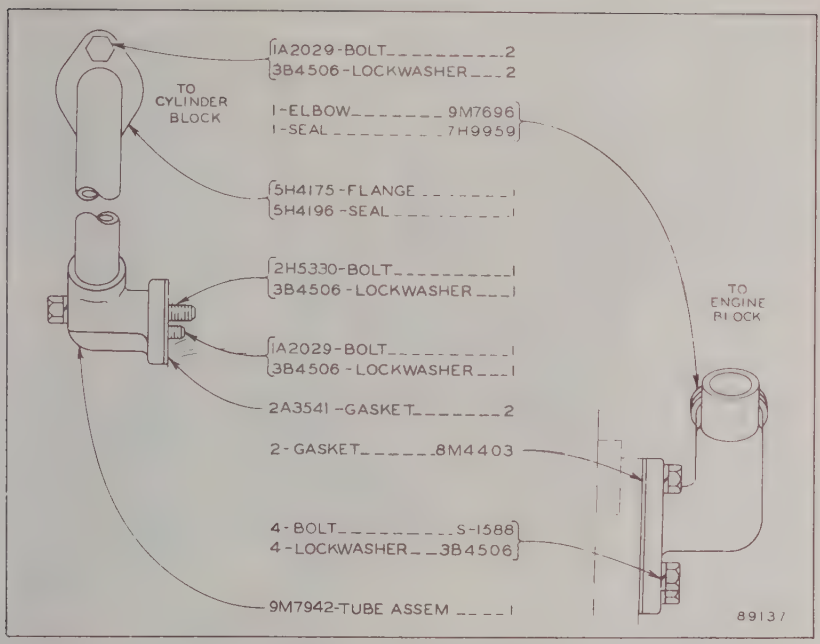
Consists of:

1	1B3057	Clip—Tube to Diesel Fuel Pump Housing
8	1B4203	Nut—Exhaust Elbow to Block
4	1B4203	Nut—Bracket to Upper Starting Engine Studs
4	1B4330	Nut—Flame Arrestor or Air Cleaner Screws
1	2B9815	Gasket—Air Inlet Pipe
4	3B4504	Lockwasher—1/4"
21	3B4506	Lockwasher—3/8"
2	3B4507	Lockwasher—7/16"
3	3B4508	Lockwasher—1/2"
6	3B4510	Lockwasher—5/8"
4	4B1282	Screw—Air Cleaner Adapter to Pipe Assembly
1	4B4280	Washer—Exhaust
1	5B494	Grommet—Clip to Tube
1	5B6018	Flame Arrester
1	6B7419	Hose—By-Pass Tube to Water Elbow
1	8B4592	Clip—By-Pass Tube
1	1D4717	Nut—Clip to Strap
1	1D4719	Nut—Exhaust
4	4F7957	Bolt—Flame Arrestor to Pipe Assembly
1	4F8965	Bolt—Bracket to Starting Engine
1	3H761	Cover—Diesel Flywheel Housing Electric Start Hole
1	3H5368	Bolt—Bracket to Starting Engine
1	5L5802	Plate—Starting Engine Air Cleaner Mounting
1	5L7845	Strap—Tube Assembly
1	6L2498	Tube Assembly—Oil Cooler By-Pass
1	6L2511	Bracket—Exhaust
1	6L2527	Tube Assembly—Exhaust
1	6L2627	Tube—Starting Engine Filter to Carburetor
1	6L2628	Bracket—Starting Engine Fuel Tank Mounting
1	7M7072	Case Assembly—Starting Engine Air Cleaner
1	8M777	Ring Gear
1	8M3120	Element—Starting Engine Air Cleaner
1	8M3271	Hand Crank Assembly
2	8M4418	Gasket—Exhaust
1	8M4418	Gasket—Bracket to Starting Engine Block
1	9M7714	Bracket—Upper Starting Engine Block to Diesel Block
1	9M7748	Bracket—Starting Engine Timing Gear Housing to Diesel Block
1	9M7749	Bracket—Starting Engine Oil Pan to Diesel Block
1	L-1351	Bolt—Tube Assembly
2	L-1351	Bolt—Starting Engine Fuel Tank Bracket to Diesel Intake Manifold
1	L-2070	Bolt—Upper Bracket to Diesel Block
2	S-1585	Bolt—Bracket to Diesel Block
3	S-1588	Bolt—Upper Bracket to Diesel Block
3	S-1589	Bolt—Bracket to Diesel Block
1	S-1621	Bolt—Exhaust
3	S-1624	Bolt—Cover to Flywheel Housing
2	T-703	Bolt—Bracket to Starting Engine Fuel Tank

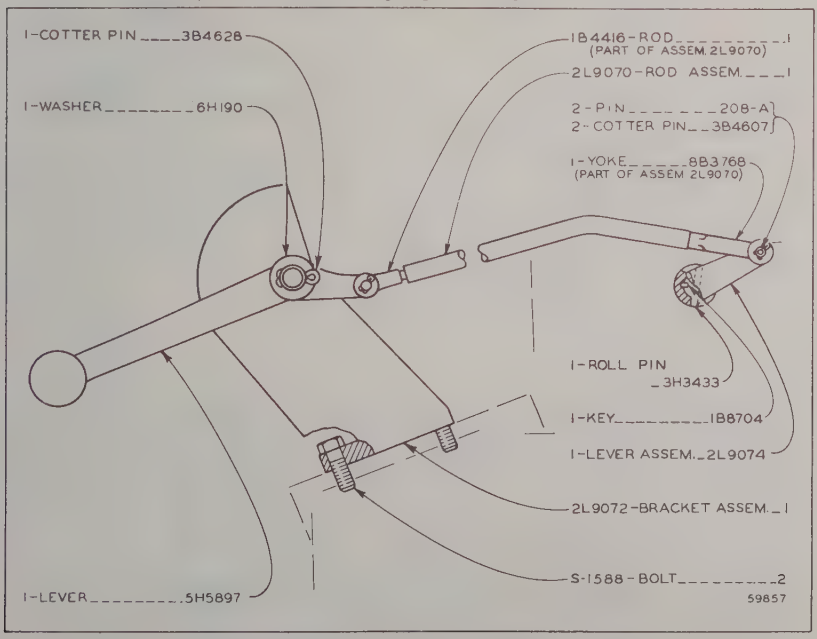
6L2589 STARTING ENGINE INSTALLATION GROUP
Part of Complete Gasoline Starting Arrangement



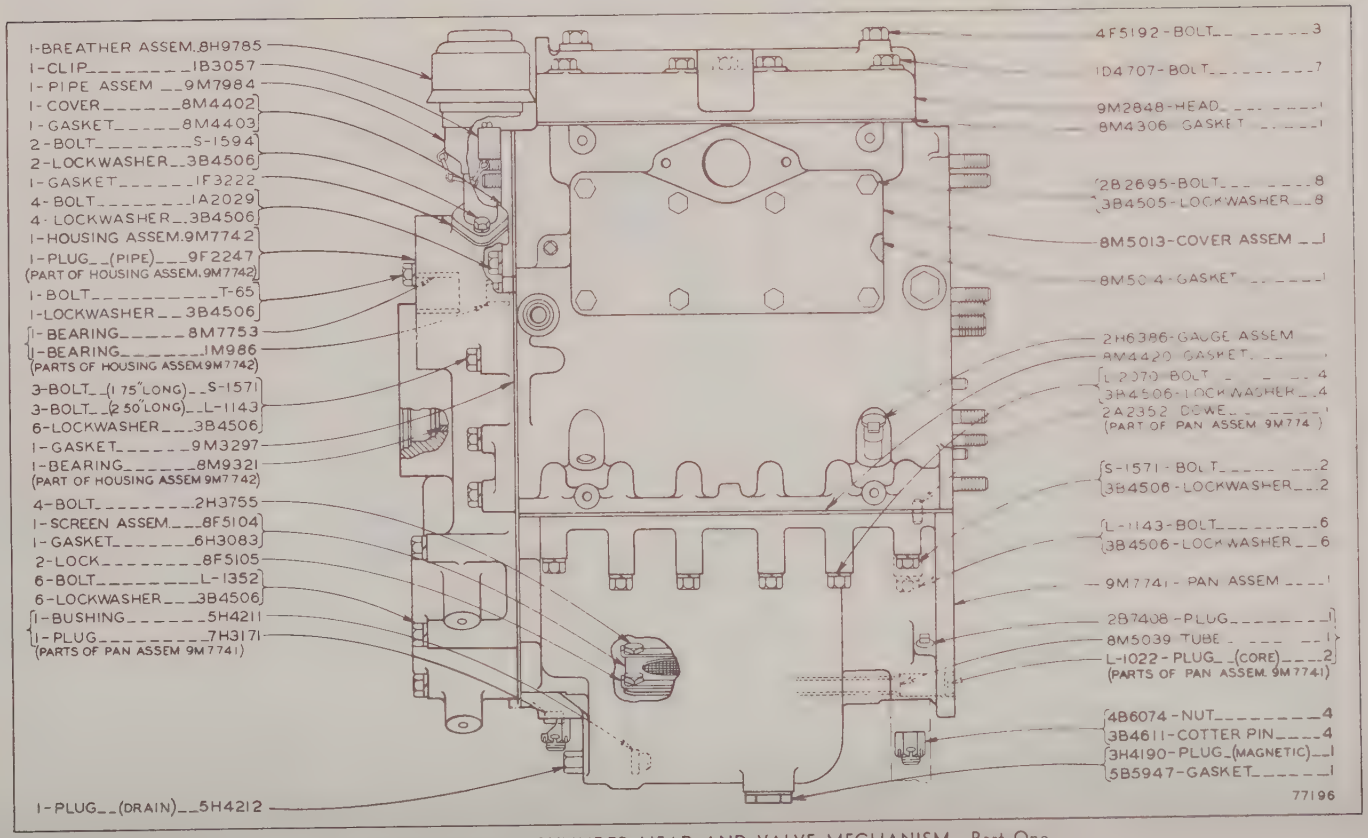
9M7894 MANUAL STARTING CRANK GROUP
Effective with Starting Engine Block No. F1252
Part of Basic Starting Engine Arrangement listed on Page 48



9M7895 WATER LINES GROUP
Effective with Starting Engine Block No. F1252
Part of Complete Gasoline Starting Engine Arrangement listed on Page 48



2L9069 COMPRESSION RELEASE CONTROL GROUP
Effective with Starting Engine Block No. F1252
Part of Complete Gasoline Starting Engine Arrangement listed on Page 48

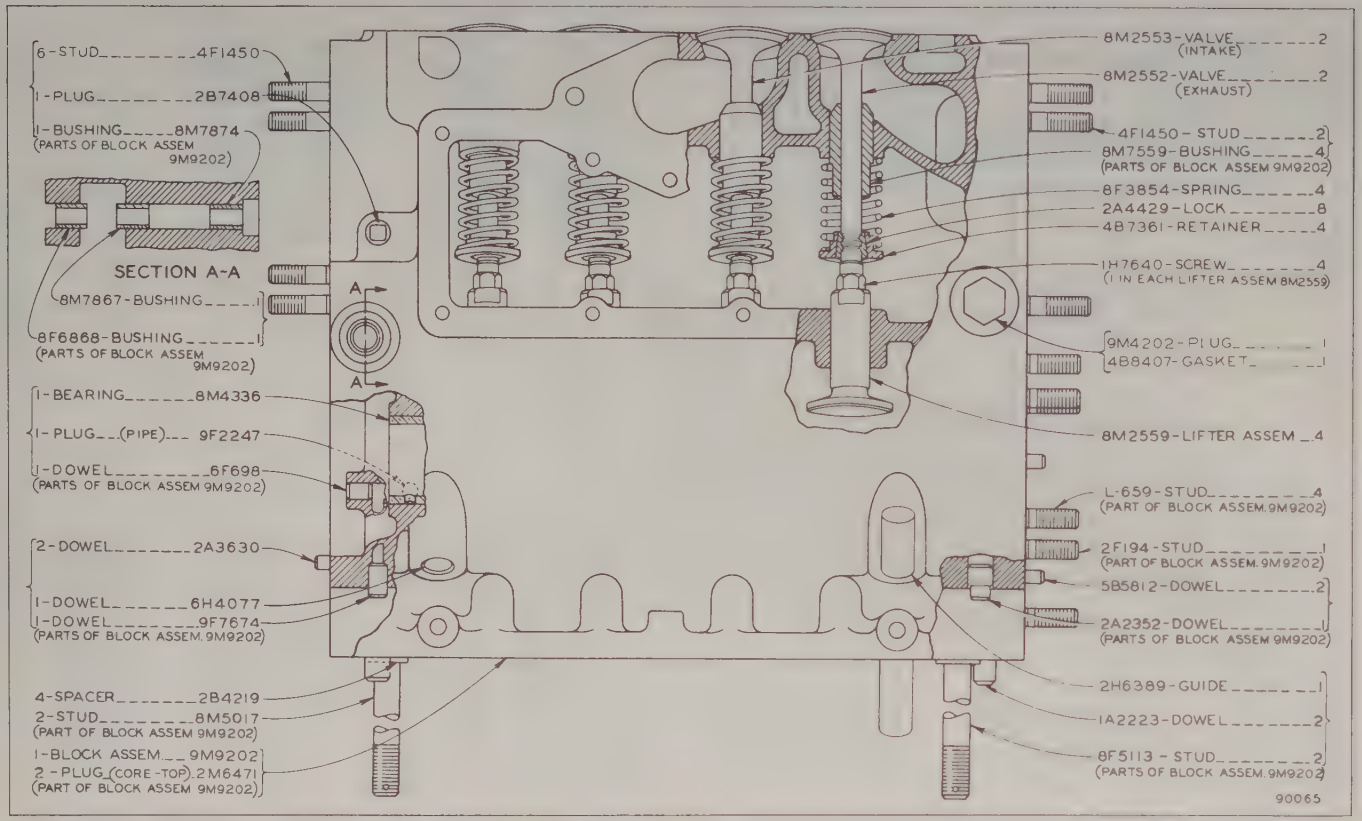


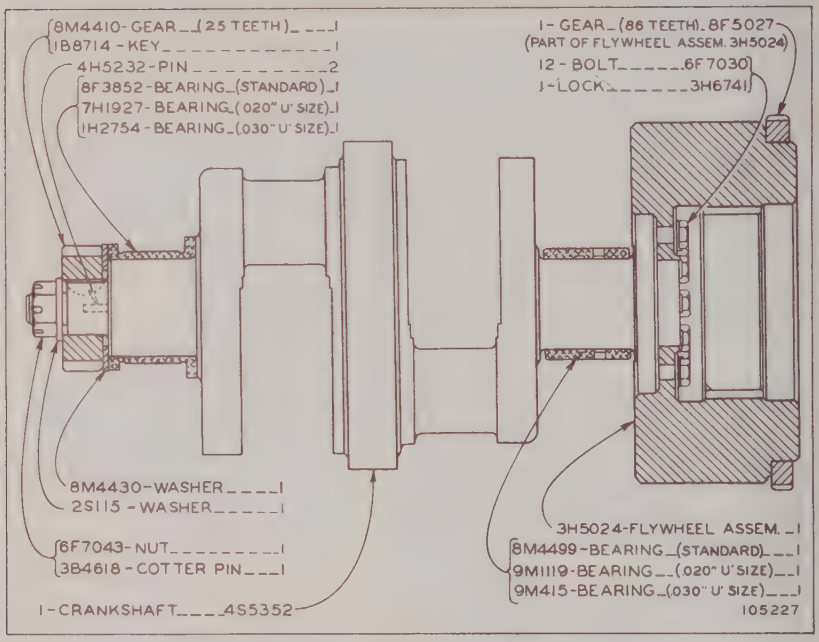
CYLINDER BLOCK, CYLINDER HEAD AND VALVE MECHANISM—Part One
Effective with Starting Engine Block No. F1252
Part of Basic Starting Engine Arrangement listed on Page 48

CYLINDER BLOCK, CYLINDER HEAD AND VALVE MECHANISM—Part Two

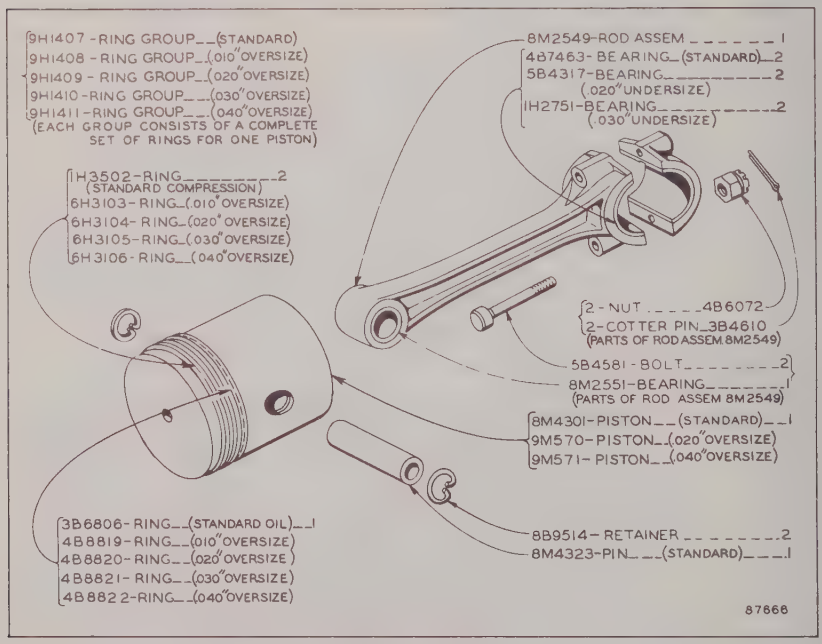
Effective with Starting Engine Block No. F1252

Part of Basic Starting Engine Arrangement listed on Page 48





CRANKSHAFT
Effective with Starting Engine Block No. F1252
Part of Basic Starting Engine Arrangement listed on Page 48

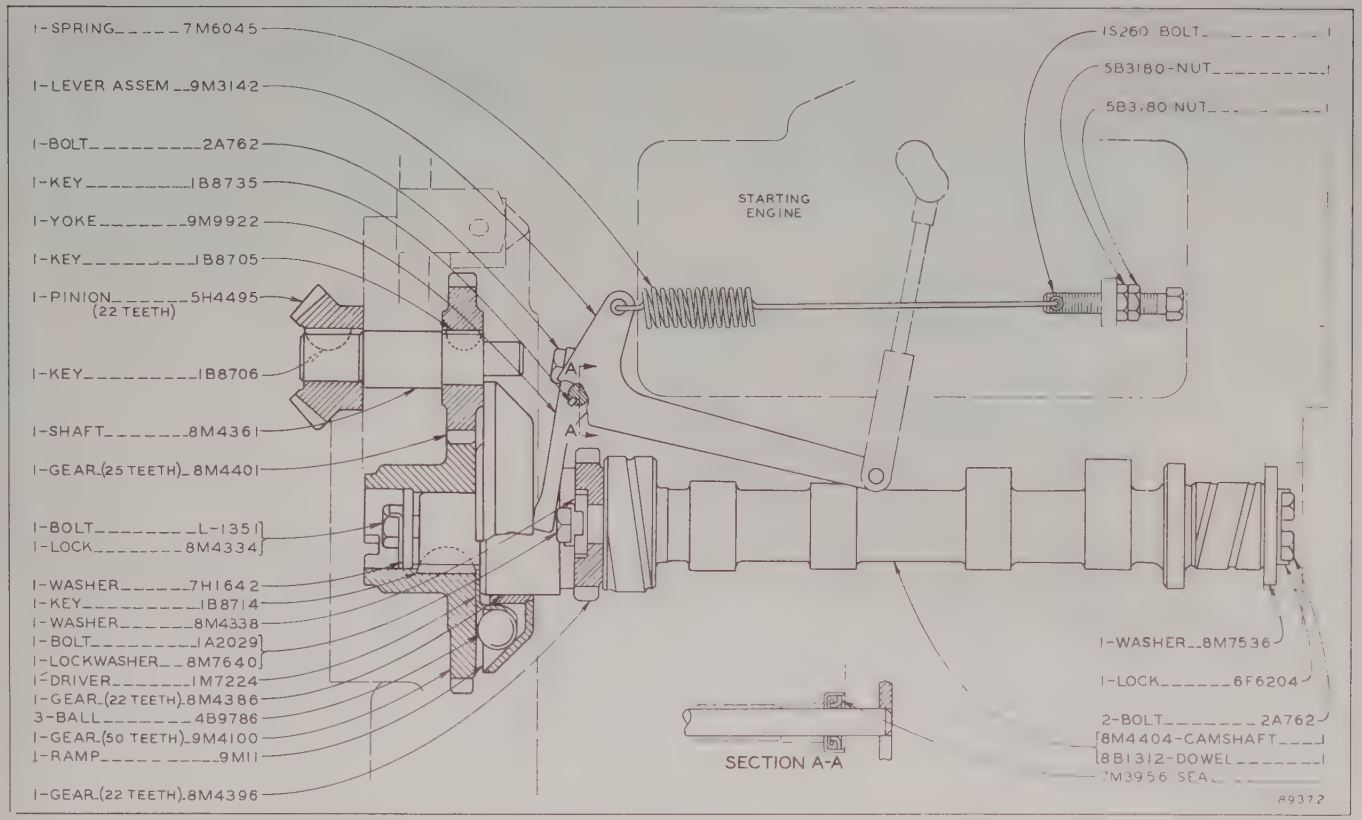


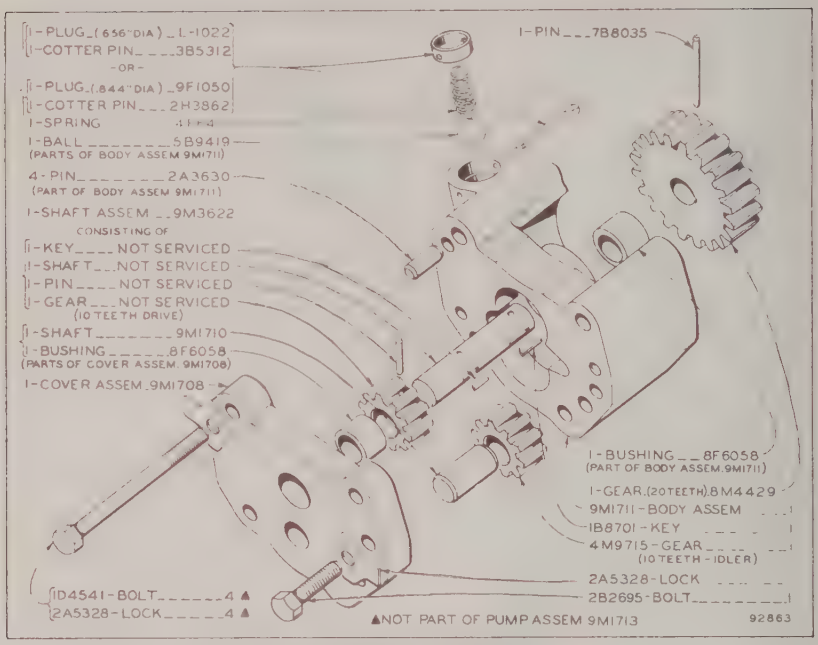
CONNECTING ROD AND PISTON—2 Required
Effective with Starting Engine Block No. F1252
Part of Basic Starting Engine Arrangement listed on Page 48

CAMSHAFT AND GOVERNOR

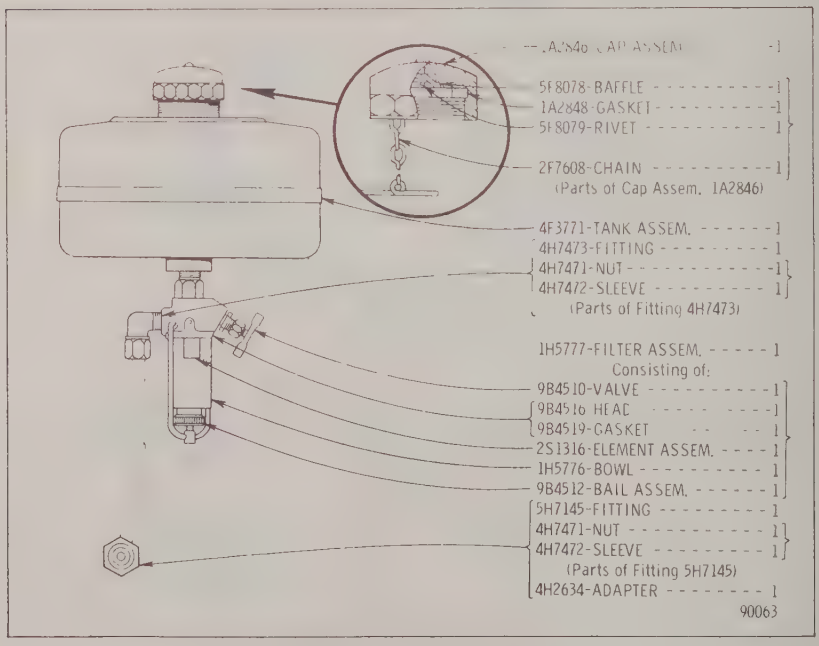
Effective with Starting Engine Block No. F1252

Part of Basic Starting Engine Arrangement listed on Page 48





9M1713 OIL PUMP ASSEMBLY
Effective with Starting Engine Block No. F1252
Part of Basic Starting Engine Arrangement listed on Page 48

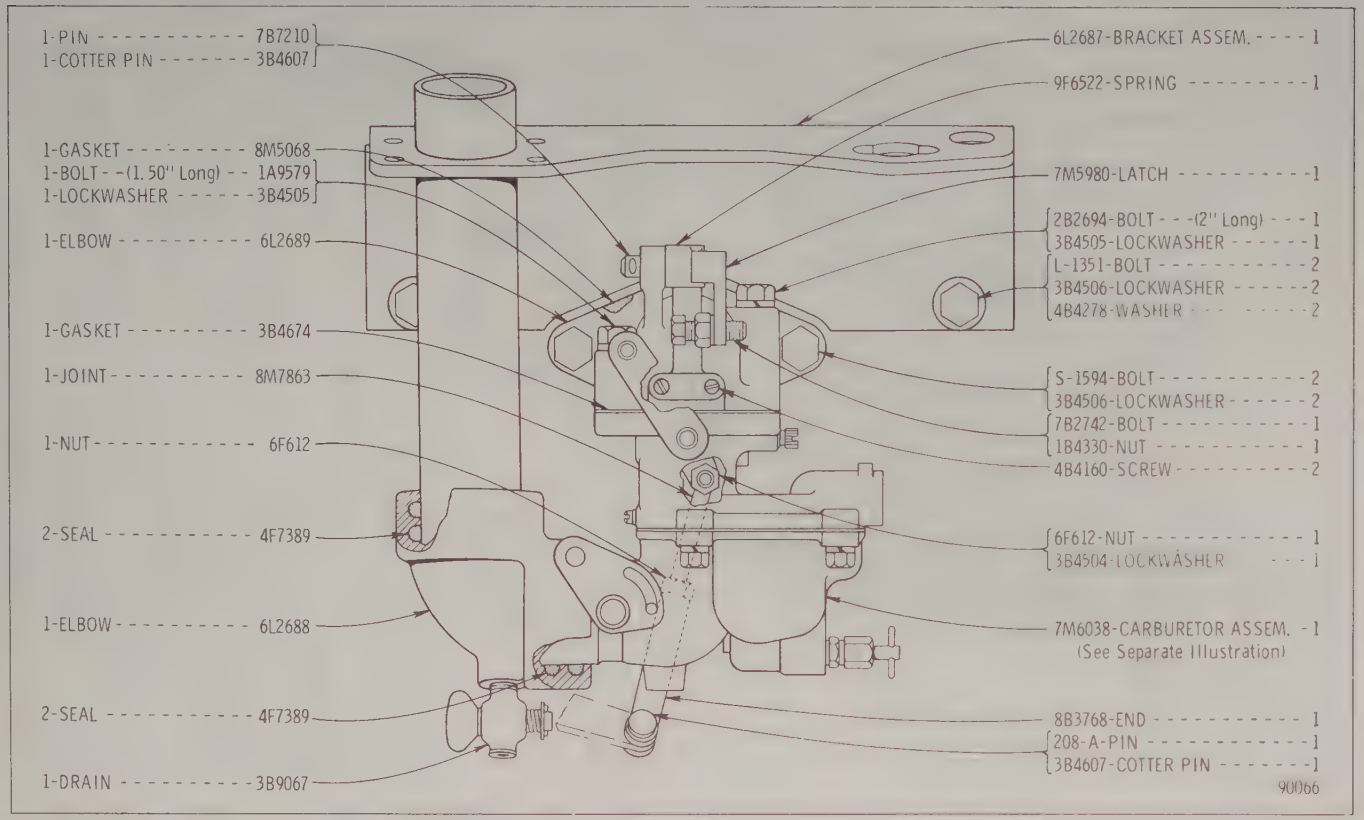


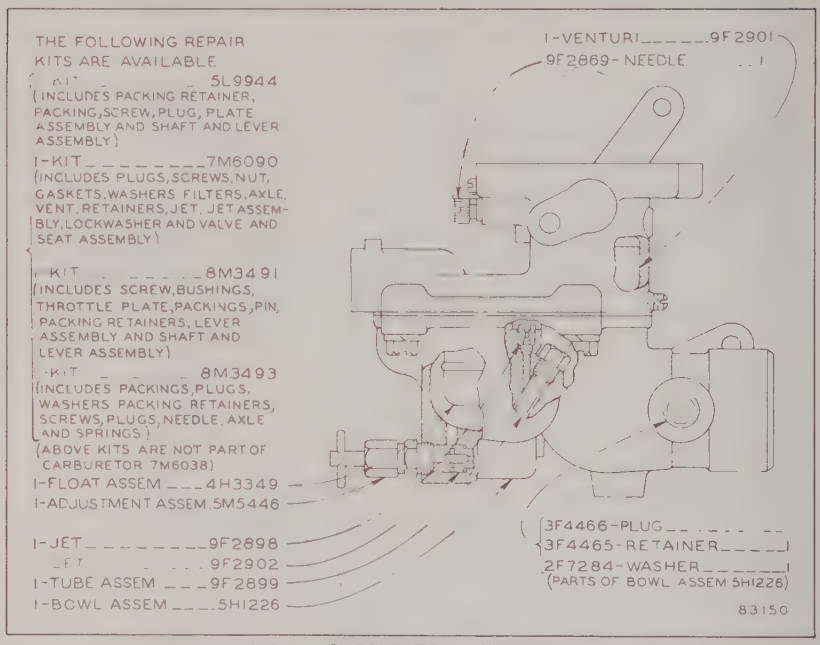
6L2579 FUEL SYSTEM GROUP
Effective with Starting Engine Block No. F1252
Part of Complete Gasoline Starting Engine Arrangement listed on Page 48

6L2529 CARBURETOR AND AIR TRANSFER PIPE GROUP

Effective with Starting Engine Block No. F1252

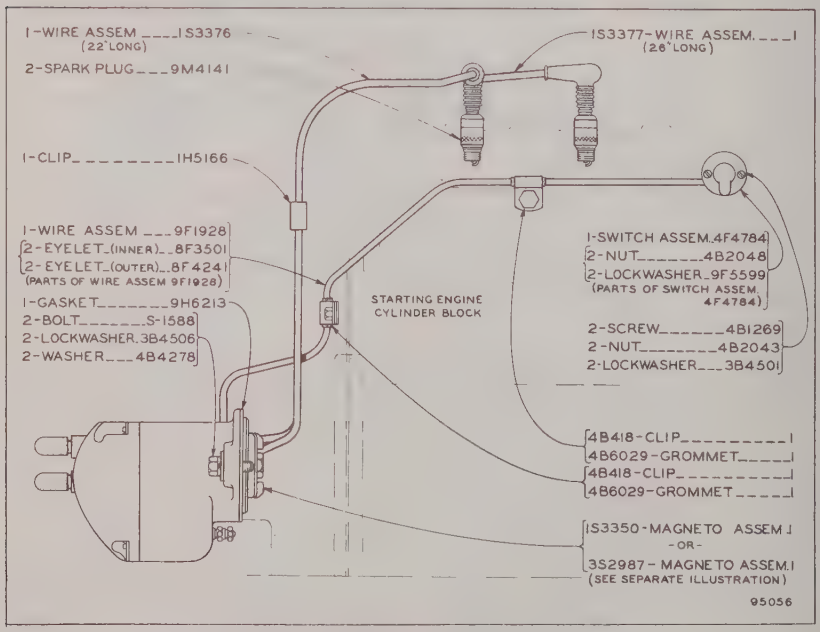
Part of Basic Starting Engine Arrangement Listed on Page 48 7M6038 Carburetor Assembly parts are shown on Page 58





7M6038 CARBURETOR ASSEMBLY

Part of 6L2529 Carburetor and Air Transfer Pipe Group shown on Page 57



4L4471 IGNITION SYSTEM GROUP

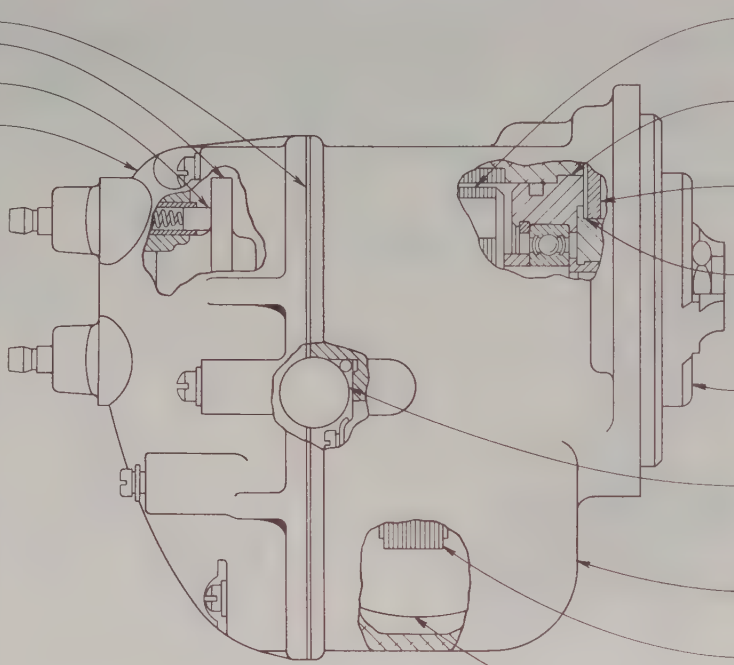
Effective with Starting Engine Block No. F1252

Part of Basic Starting Engine Arrangement listed on Page 48

1S3350 and 3S2987 Magneto Assembly parts are shown on Pages 59 and 60

1S3350 MAGNETO ASSEMBLY

Part of 4L4471 Ignition System Group shown on Page 58

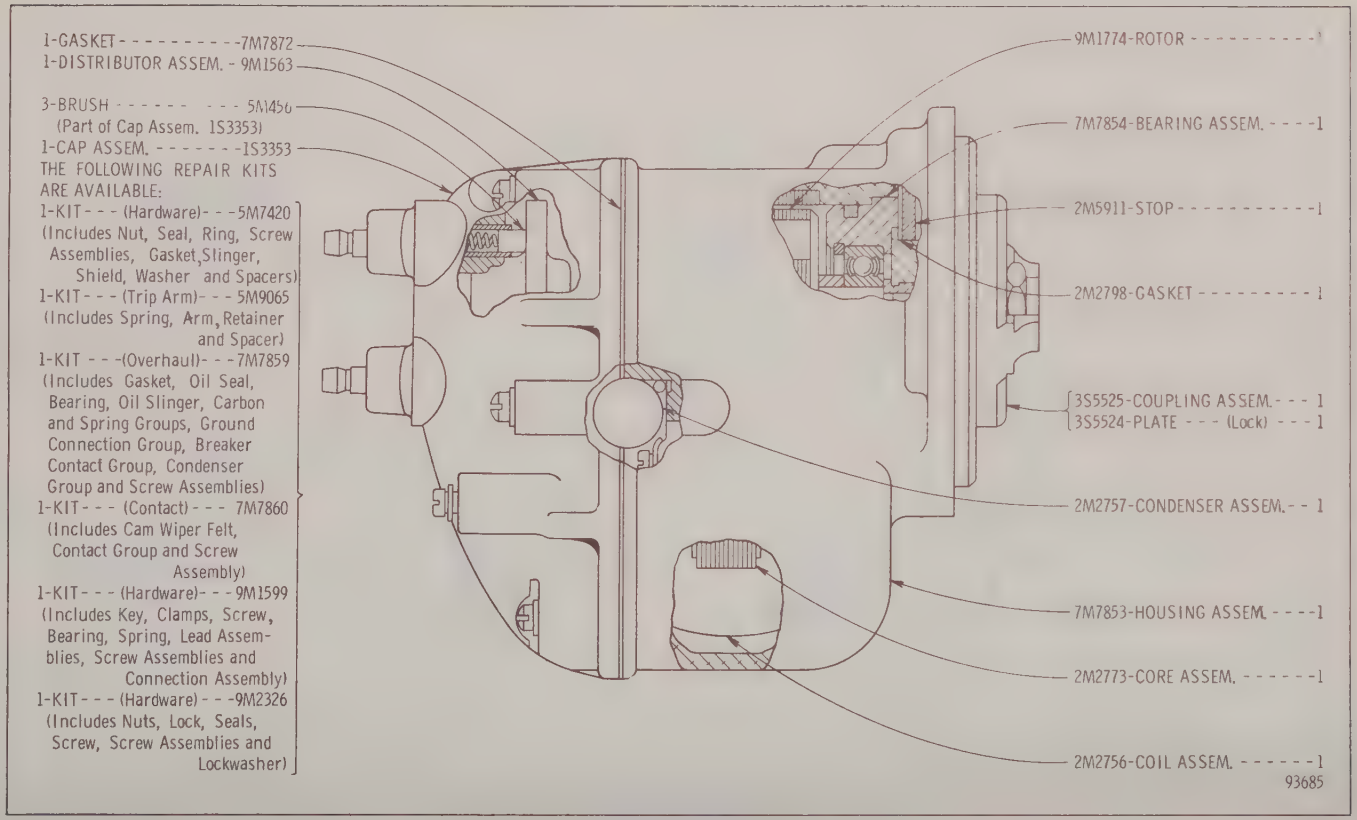


1-GASKET - - - - - - - - - - 7M7872
1-DISTRIBUTOR ASSEM. - 9M1563

3-BRUSH - - - - - - - - - - 5M456
(Part of Cap Assem. 1S3353)
1-CAP ASSEM. - - - - - - - 1S3353
THE FOLLOWING REPAIR KITS ARE AVAILABLE:
1-KIT - - - (Hardware) - - - 5M7420
(Includes Nut, Seal, Ring, Screw Assemblies, Gasket, Slinger, Shield, Washer, and Spacers)
1-KIT - - - (Trip Arm) - - - 5M9065
(Includes Spring, Arm, Retainer and Spacer)
1-KIT - - - (Overhaul) - - - 7M7859
(Includes Gasket, Oil Seal, Bearing, Oil Slinger, Carbon and Spring Groups, Ground Connection Group, Breaker Contact Group, Condenser Group and Screw Assemblies)
1-KIT - - - (Contact) - - - 7M7860
(Includes Cam Wiper Felt, Contact Group and Screw Assembly)
1-KIT - - - (Hardware) - - - 9M1599
(Includes Key, Clamps, Screw, Bearing, Spring, Lead Assemblies, Screw Assemblies and Connection Assembly)
1-KIT - - - (Hardware) - - - 9M2326
(Includes Nuts, Lock, Seals, Screw, Screw Assemblies and Lockwasher)

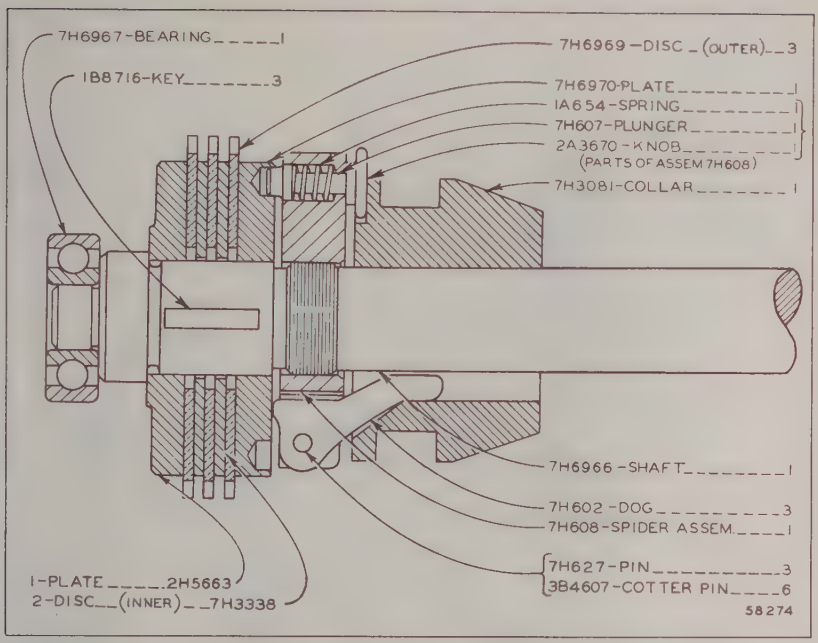
9M1774-ROTOR - - - - - - - - - - 1
7M7854-BEARING ASSEM. - - - - 1
2M5911-STOP - - - - - - - - - - - 1
2M2798-GASKET - - - - - - - - - 1
5M5914-COUPLING ASSEM. - - - 1
7M7855-PLATE - - - - - - - - - - 1
2M2757-CONDENSER ASSEM. - - 1
7M7853-HOUSING ASSEM. - - - - 1
2M2773-CORE ASSEM. - - - - - - 1
2M2756-COIL ASSEM. - - - - - - 1

73804

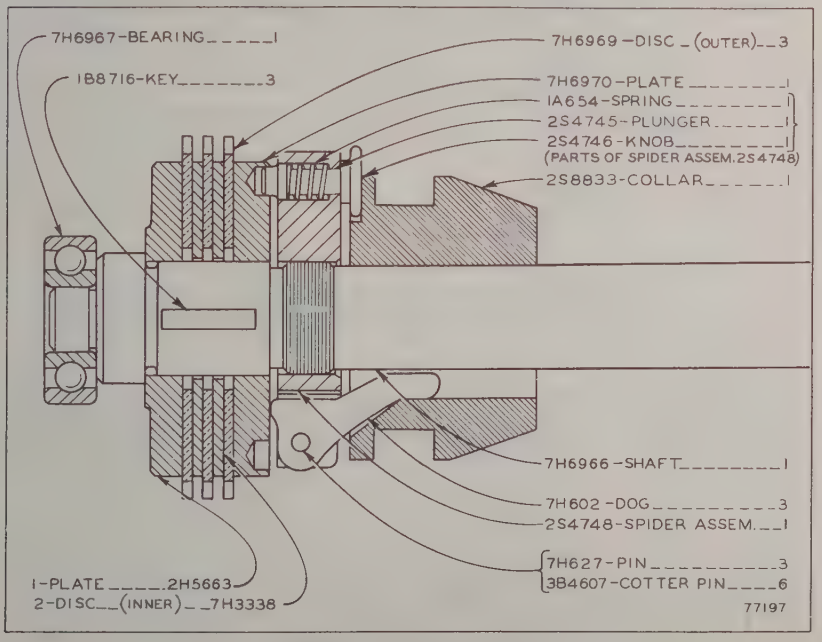


3S2987 MAGNETO ASSEMBLY

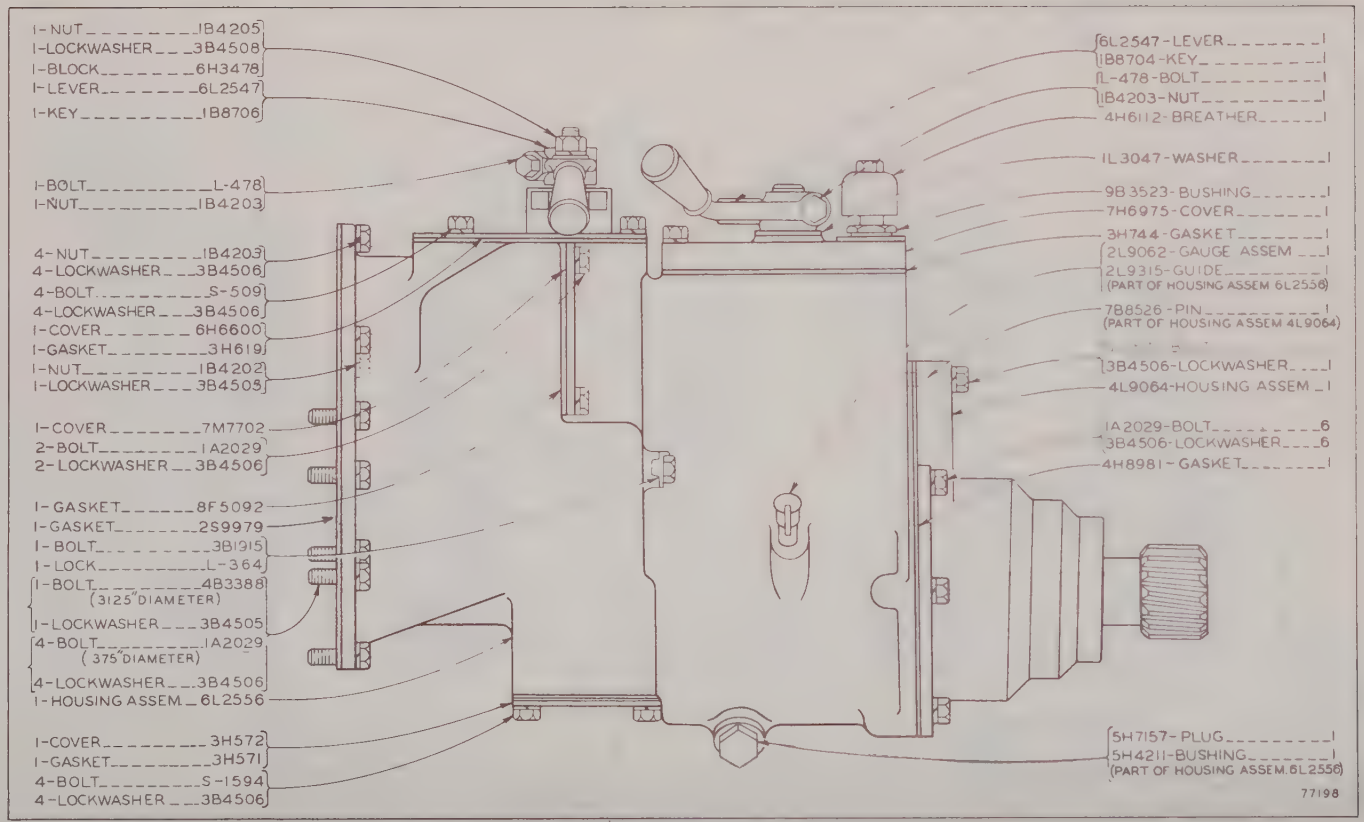
Part of 4L4471 Ignition System Group shown on Page 58



9H4826 CLUTCH GROUP
Serial No. 46B1558 to 46B1663 inclusive
Part of 6L2583 Starting Engine and Transmission Arrangement listed on Page 48



9H4826 CLUTCH GROUP
Effective with Serial No. 46B1664—Up and 77B1—Up
Part of 6L2583 Starting Engine and Transmission Arrangement listed on Page 48



6L2538 TRANSMISSION AND STARTER PINION GROUP—Part One

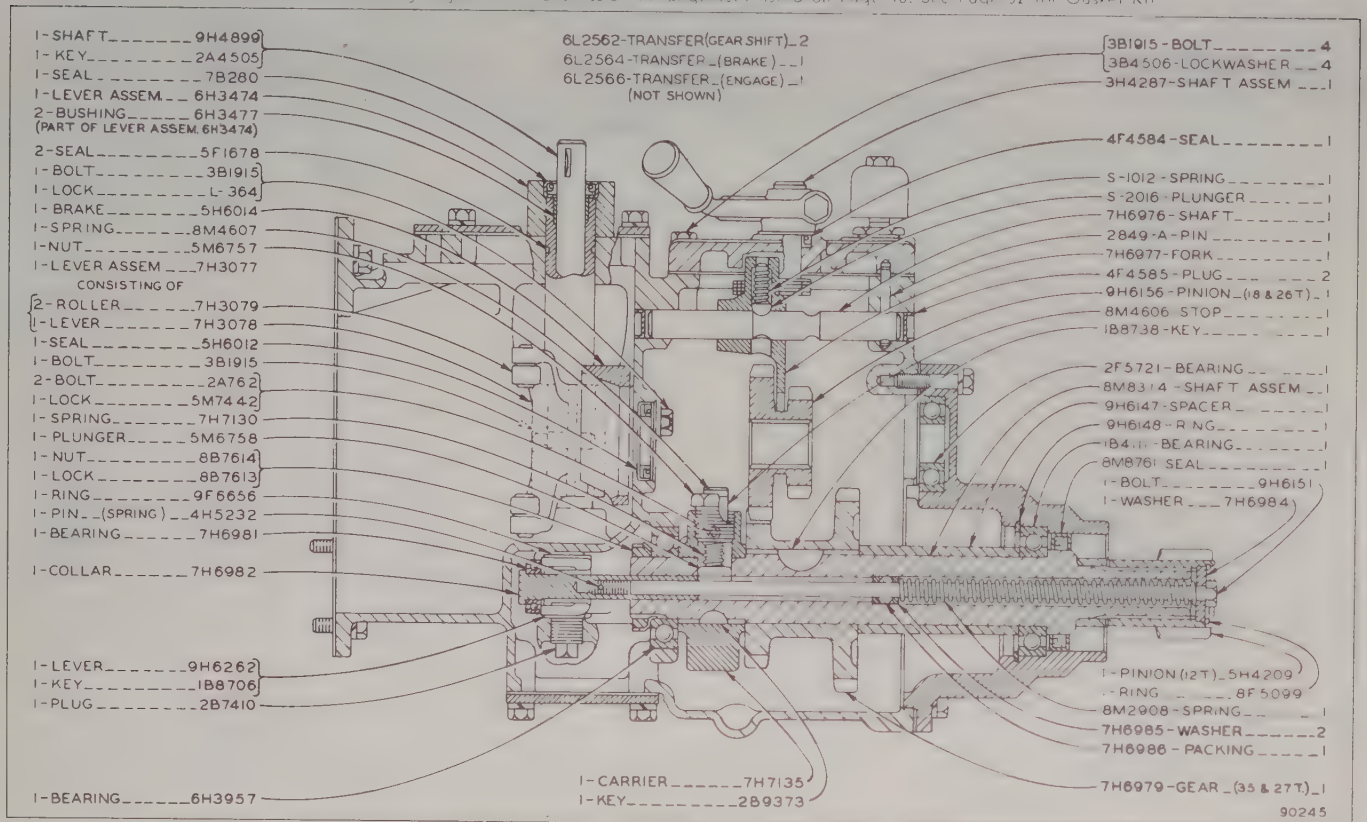
Effective with Starting Engine Block No. F1252

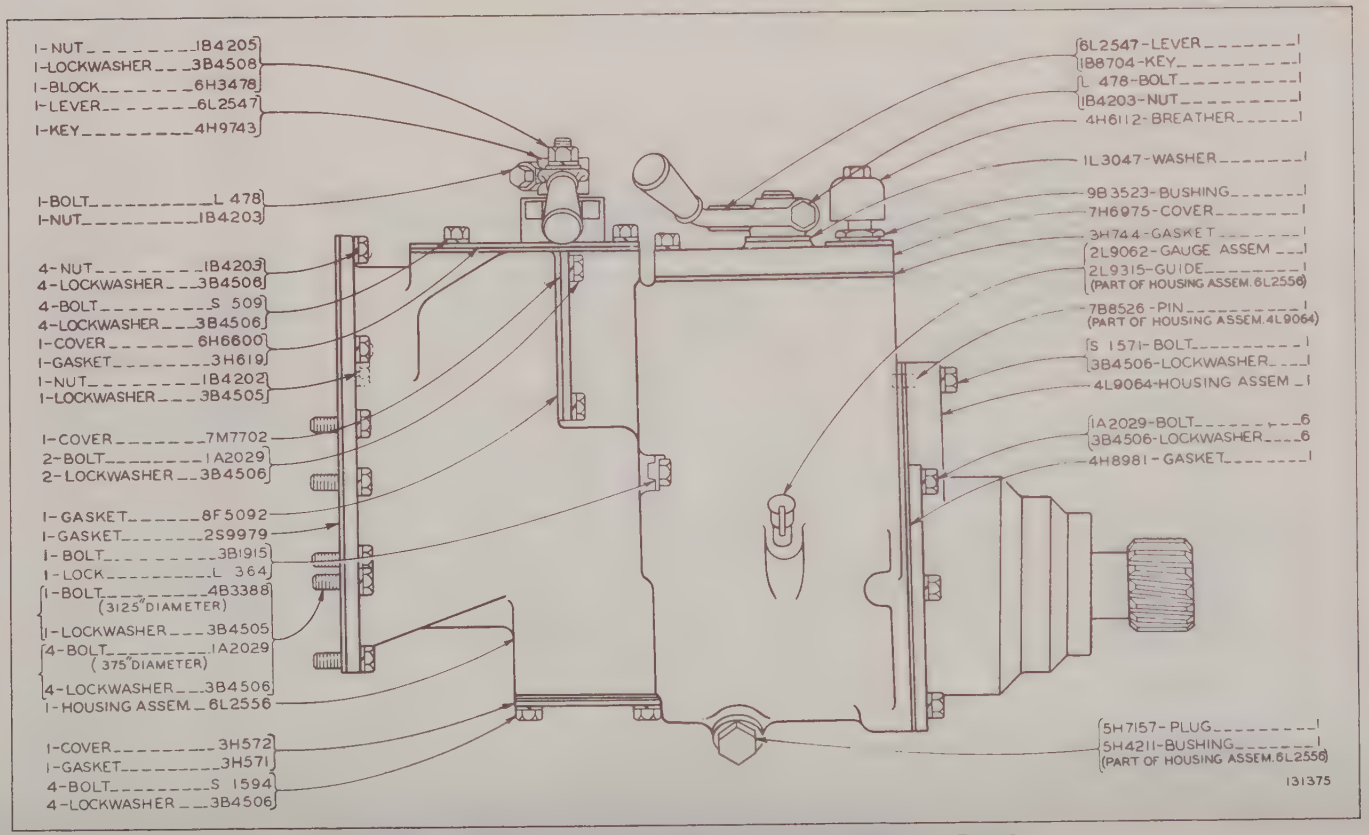
Part of 6L2583 Starting Engine and Transmission Arrangement listed on Page 48

6L2538 TRANSMISSION AND STARTER PINION GROUP—Part Two

Effective with Starting Engine Block No. F1252

Part of 6L2583 Starting Engine and Transmission Arrangement listed on Page 48. See Page 32 for Gasket Kit



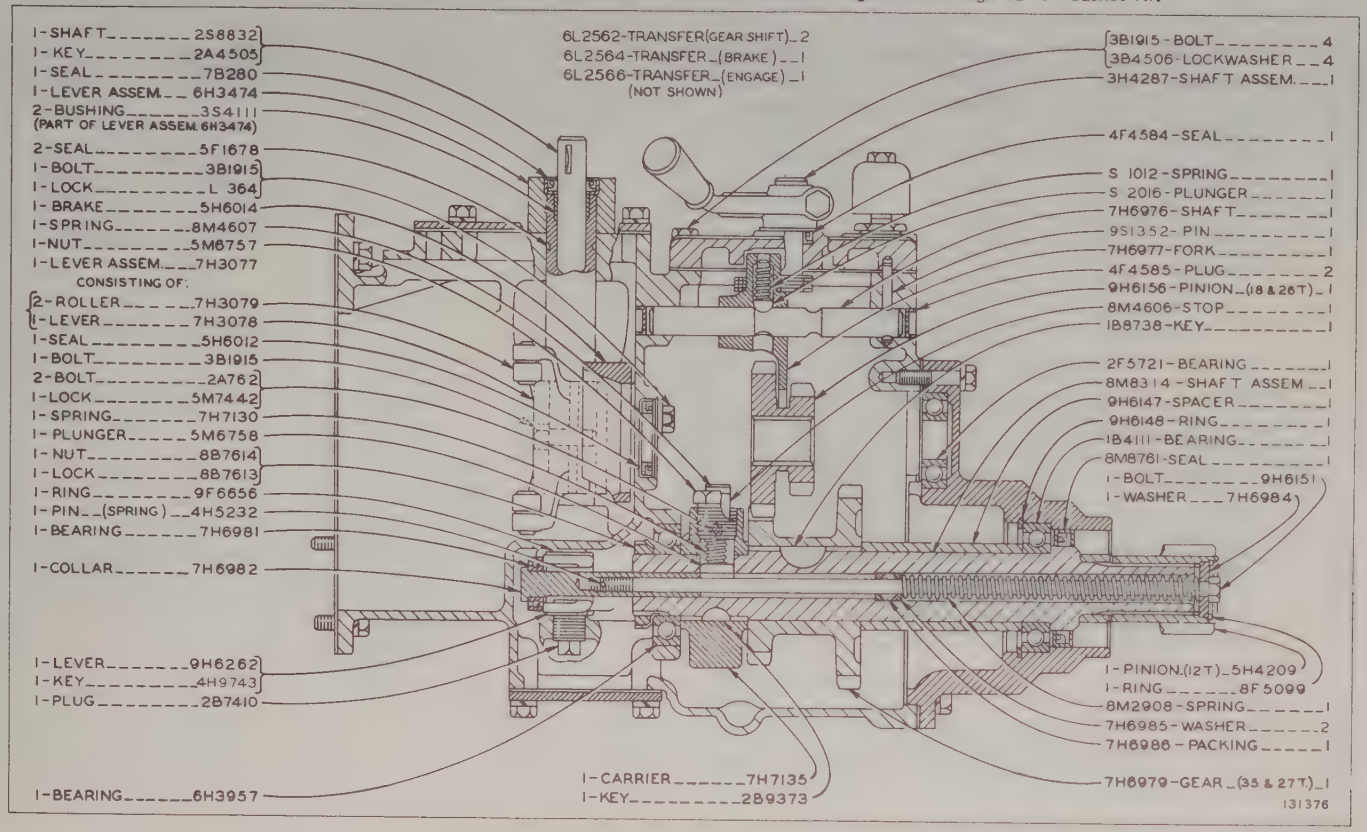


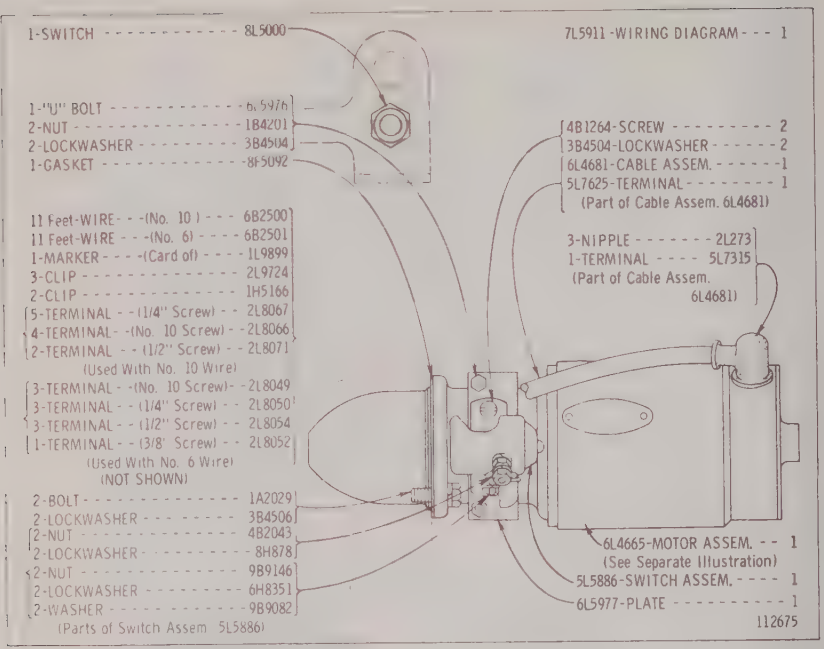
6L2538 TRANSMISSION AND STARTER PINION GROUP—Part 1—Type 2
Effective with Starting Engine Block No. F1252
Part of 6L2583 Starting Engine and Transmission Arrangement listed on Page 48

6L2538 TRANSMISSION AND STARTER PINION GROUP—Part 2—Type 2

Effective with Starting Engine Block No. F1252

Part of 6L2583 Starting Engine & Transmission Arrangement listed on Page 48. See Page 32 for Gasket Kit





6L5978 ELECTRIC STARTING GROUP—12 Volt
6L4665 Electric Starting Motor parts are shown on Page 68

5L5433 Arrangement--Dual Motor

		Consists of:	Page
1	5L1621	Fuel Priming Pump Group	68A
	- or -		
1	8L4943	Fuel Priming Pump Group	68B
1	6L1551	Dual Motor Electric Starting Group	64A

5L5434 Arrangement--Single Motor

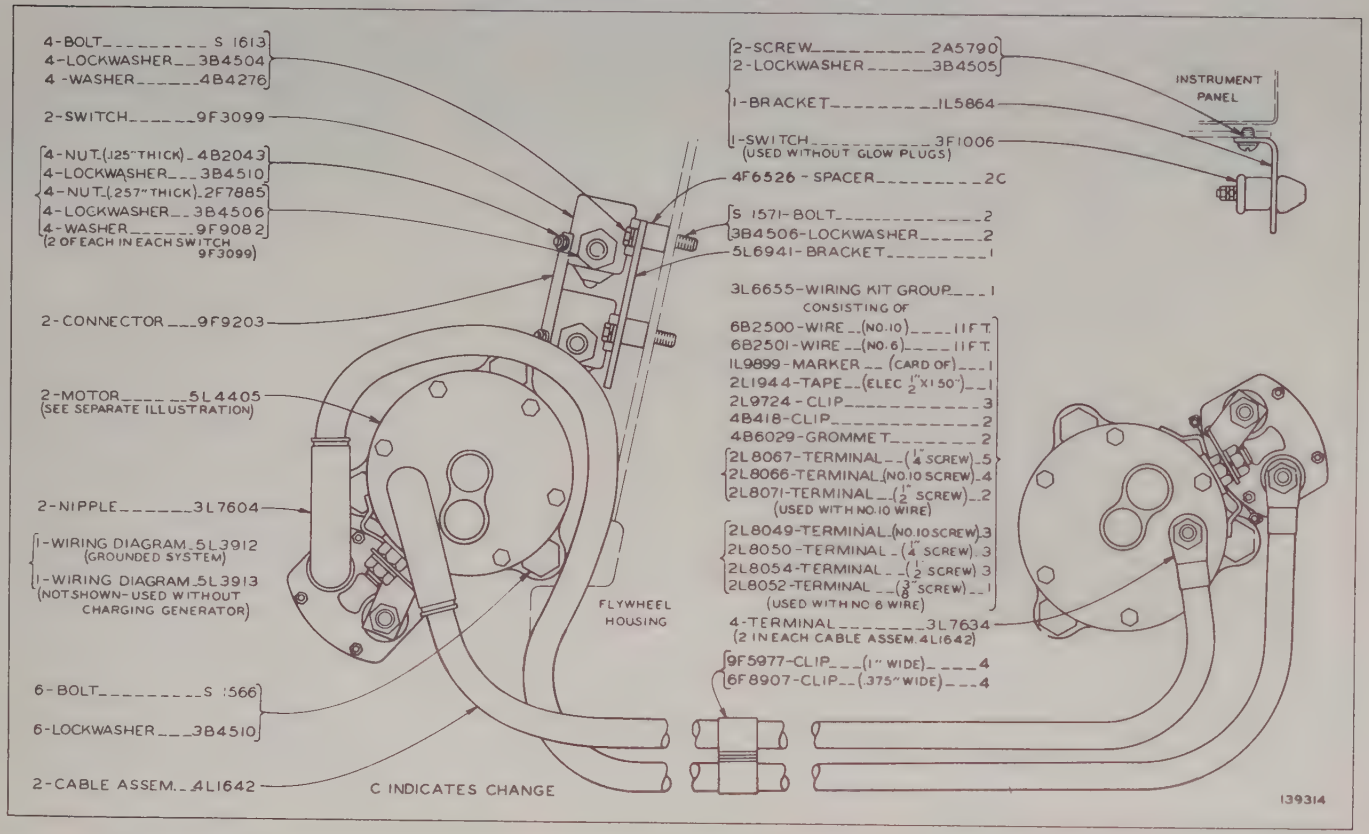
		Consists of:	
1	5L1621	Fuel Priming Pump Group	68A
	- or -		
1	8L4943	Fuel Priming Pump Group	68B
1	6L1550	Single Motor Electric Starting Group	69

ELECTRIC STARTING ARRANGEMENTS—32 Volt
Note: Glow plugs are recommended in temperatures below 60 degrees Fahrenheit

6L1551 DUAL MOTOR ELECTRIC STARTING GROUP—32 Volt—Type 1

Also part of 5L5433 Dual Motor Electric Starting Arrangement listed on Page 64

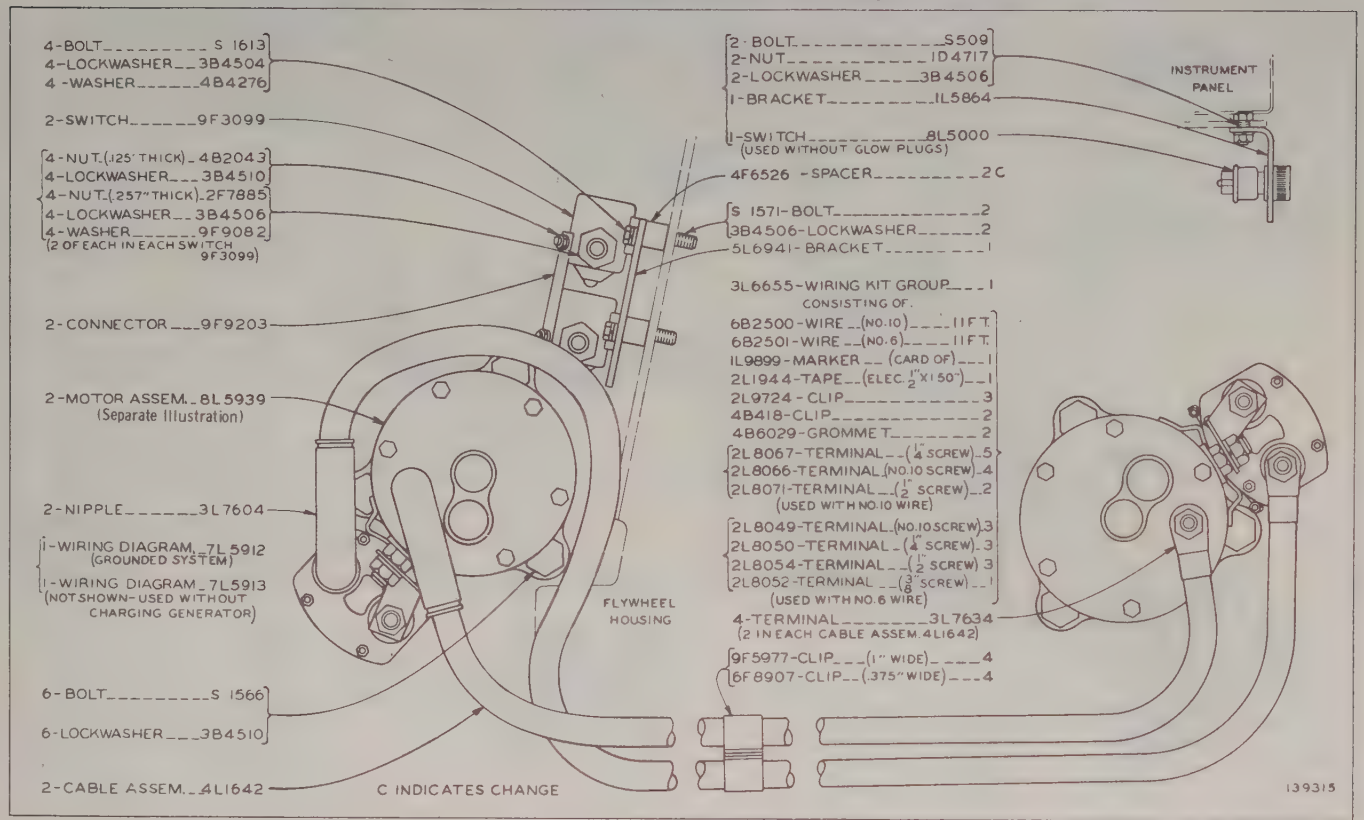
5L4405 Motor parts are shown on Pages 66 through 66C-2

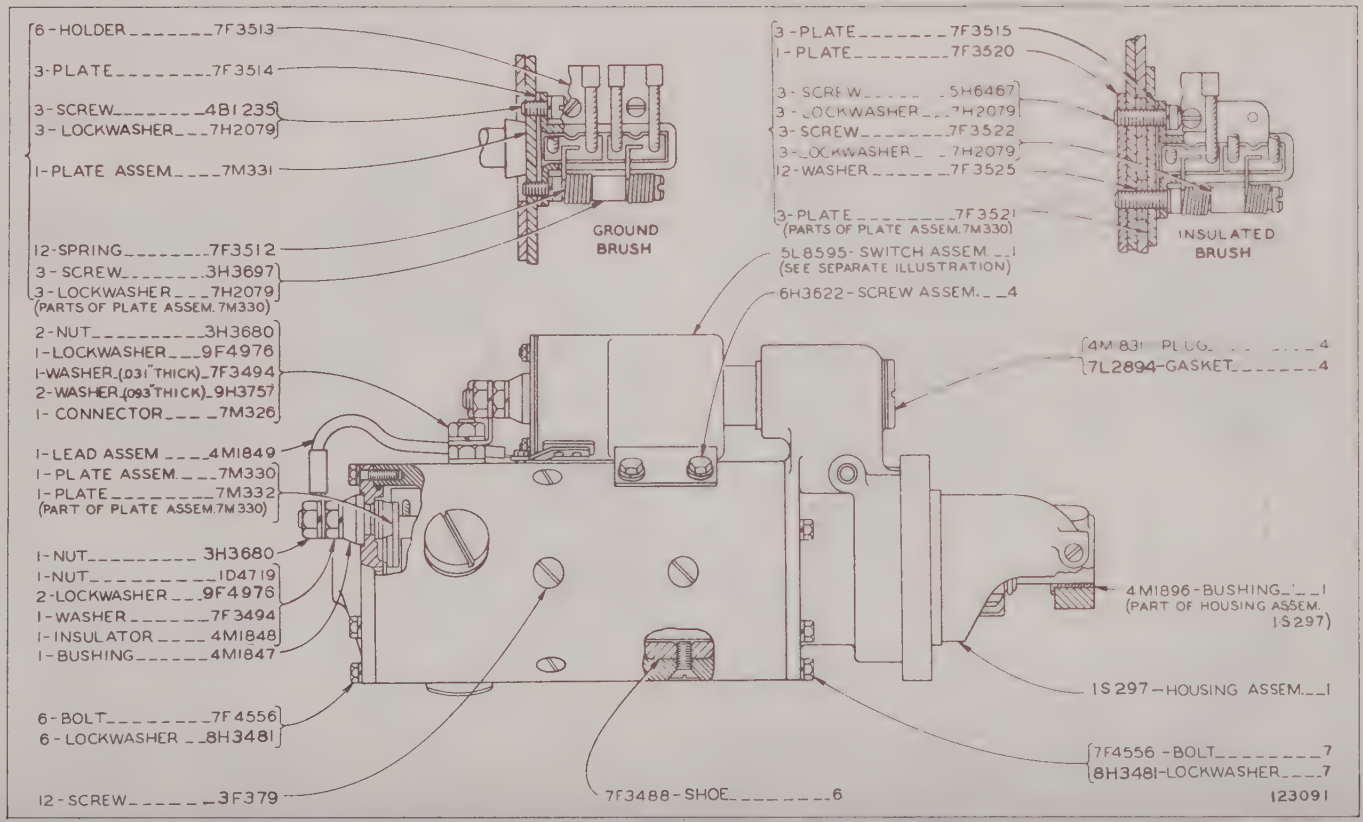


6L1551 DUAL MOTOR ELECTRIC STARTING GROUP–32 Volt–Type 2

Also part of 5L5433 Dual Motor Electric Starting Arrangement listed on Page 64

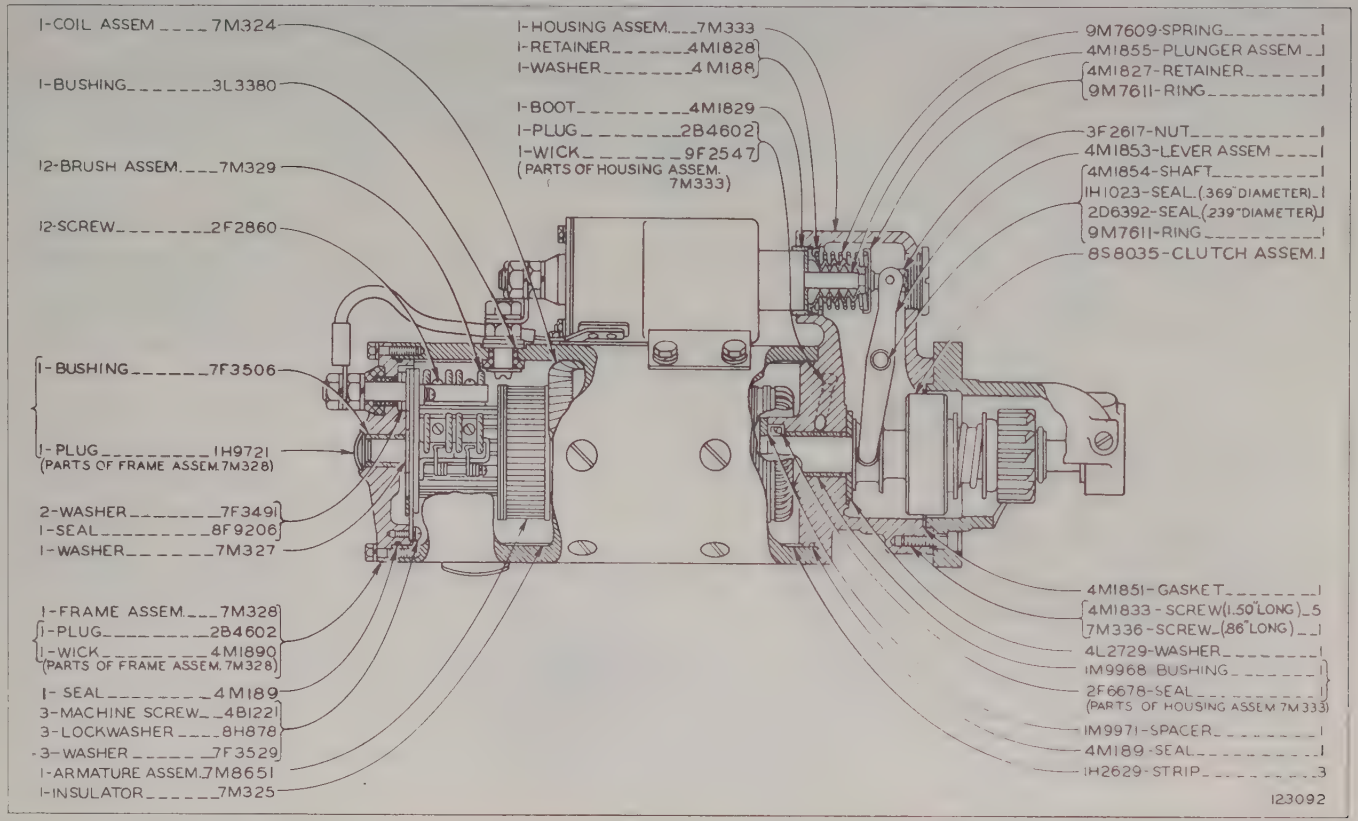
8L5939 Motor parts are shown on Pages 64D through 64E-2

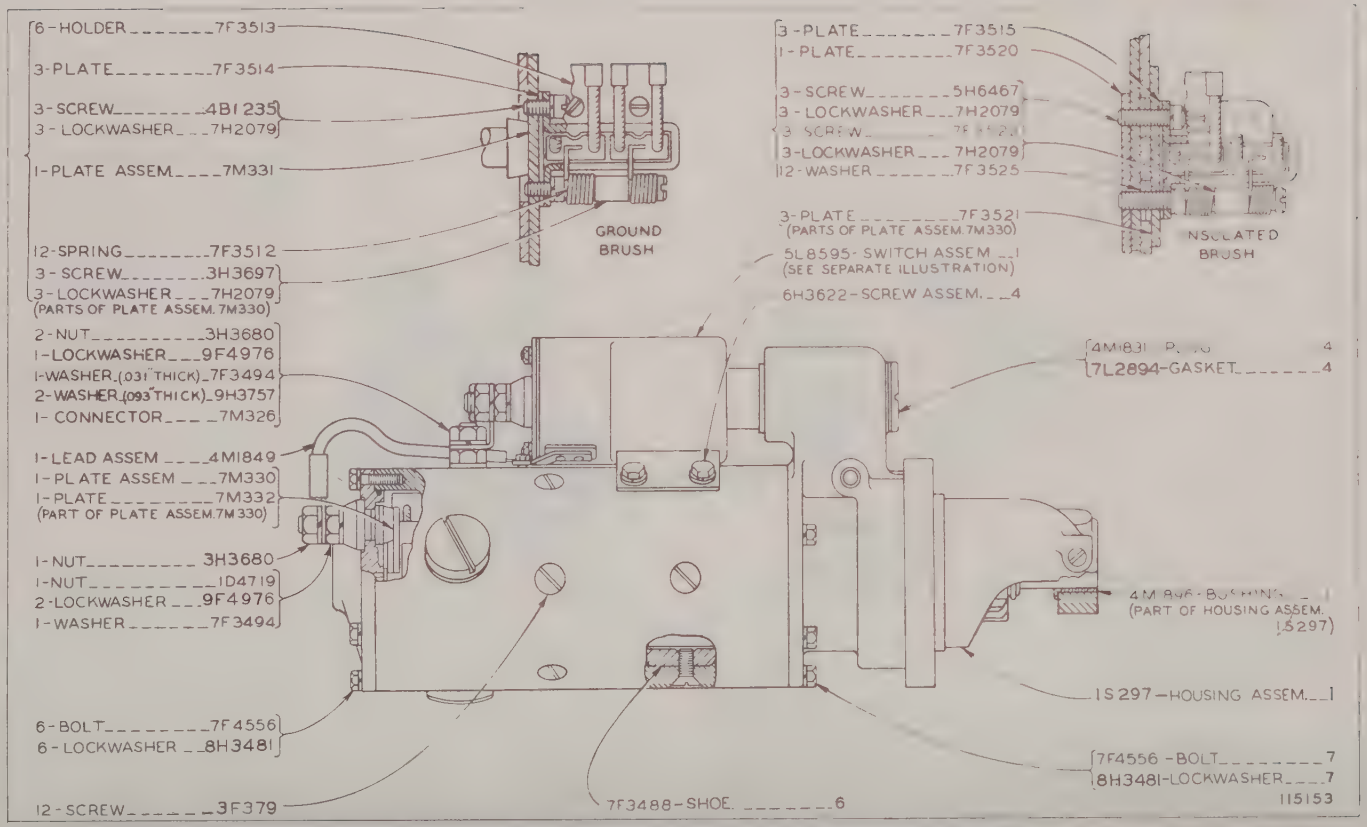




8L5939 ELECTRIC STARTING MOTOR ASSEMBLY—R.H.—32 Volt—Part 1—Type 1—Replaced by 8L5937 shown on Pages 64F through 65B
Part of 6L1551, 6L1550 and 3N743 Electric Starting Motor Groups shown on Pages 64C, 69 and 128C
5L8595 Switch parts are shown on Pages 70 and 70-1

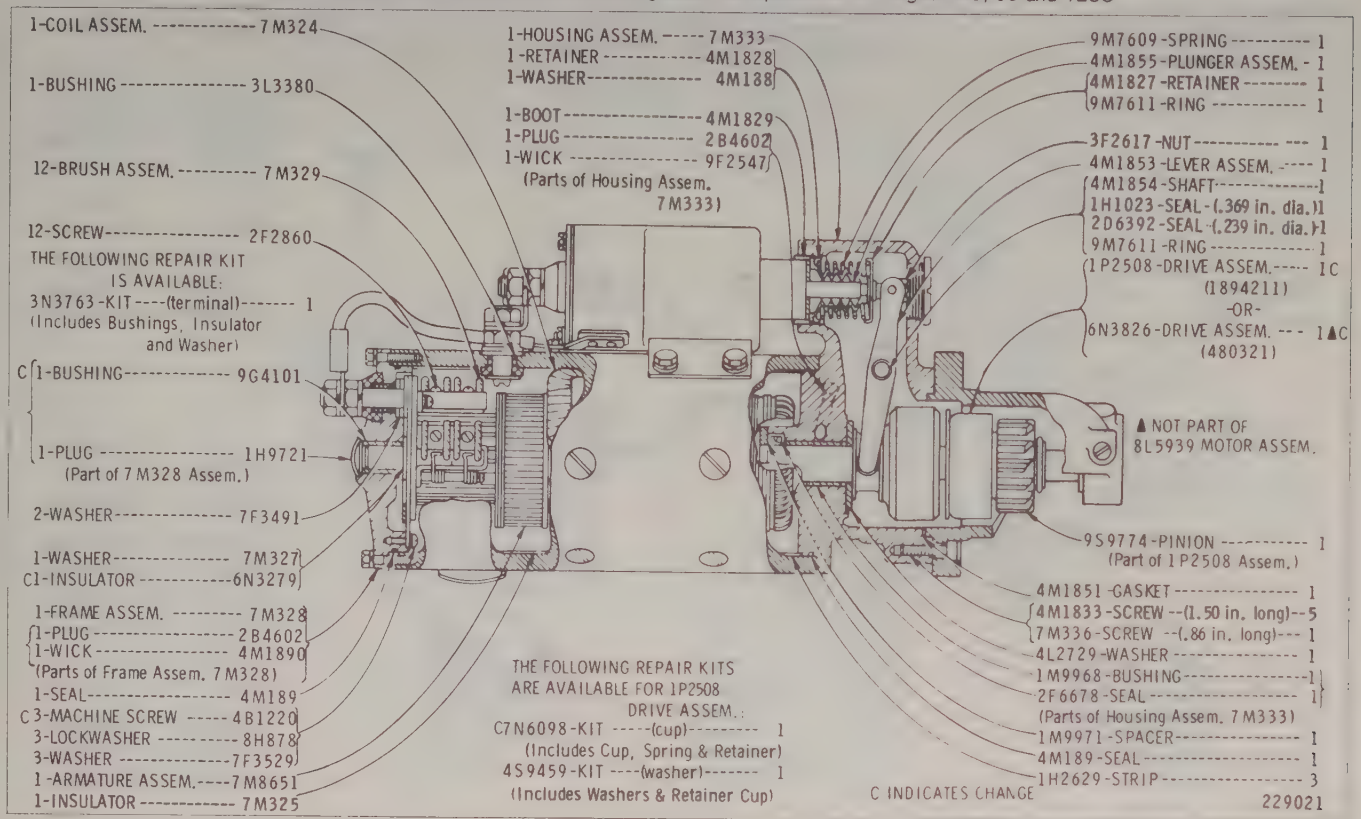
8L5939 ELECTRIC STARTING MOTOR ASSEMBLY—R.H.—32 Volt—Part 2—Type 1—Replaced by 8L5937 shown on Pages 64F through 65B
Part of 6L1551, 6L1550 and 3N743 Electric Starting Motor Groups shown on Pages 64C, 69 and 128C

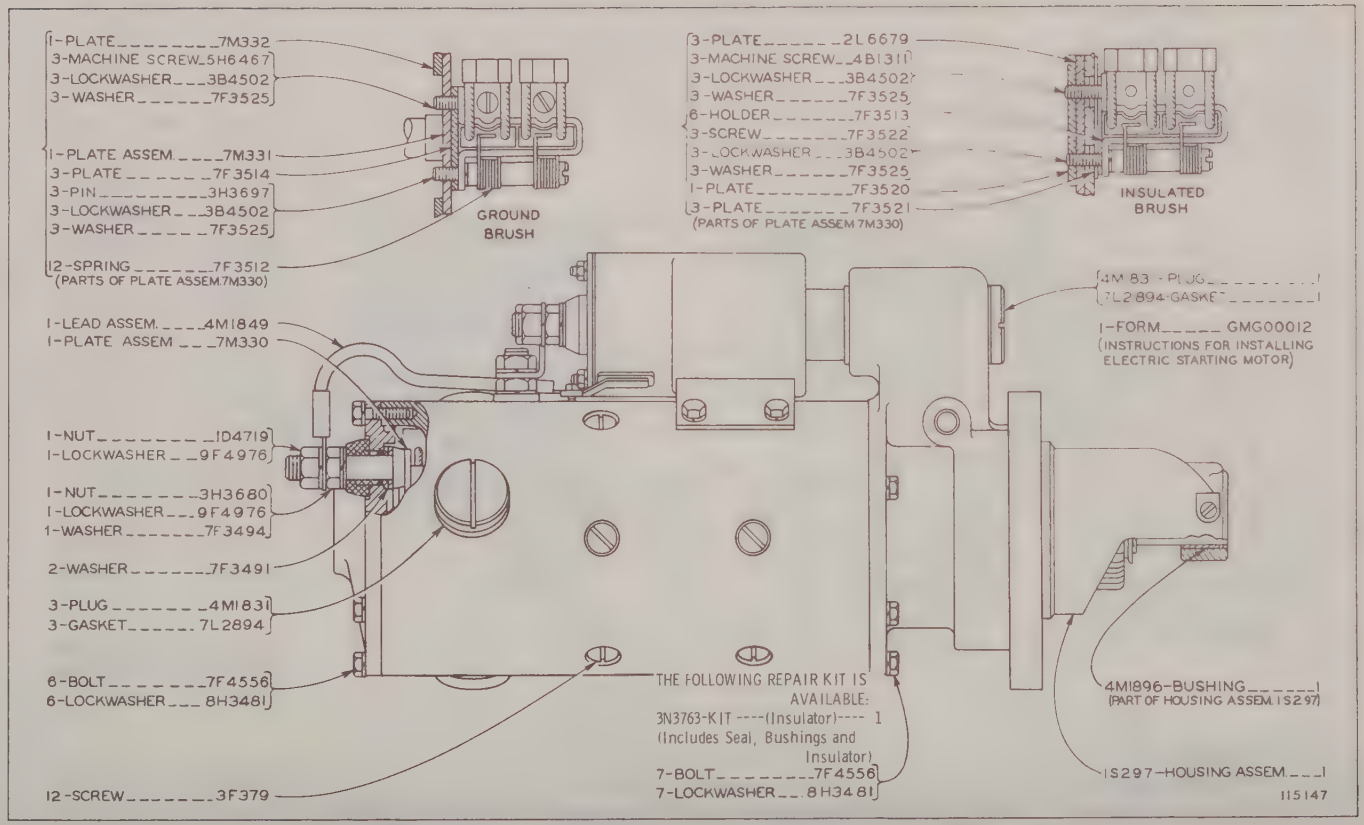




8L5939 ELECTRIC STARTING MOTOR ASSEMBLY—R.H.—32 Volt—Part 1—Type 2—Replaced by 8L5937 shown on Pages 64F through 65B
Part of 6L1551, 6L1550 and 3N743 Electric Starting Motor Groups shown on Pages 64C, 69 and 128C
5L8595 Switch parts are shown on Pages 70 & 70-1

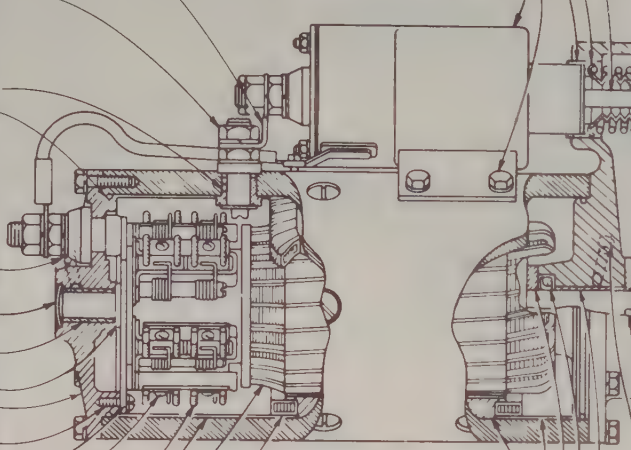
8L5939 ELECTRIC STARTING MOTOR ASSEMBLY—R.H.—32 Volt—Part 2—Type 2—Replaced by 8L5937 shown on Pages 64F through 65B
Part of 6L1551, 6L1550 and 3N743 Starting Motor Groups shown on Pages 64C, 69 and 128C





8L5937 ELECTRIC STARTING MOTOR ASSEMBLY—32 Volt—Part 1—Type 2

8L5937 ELECTRIC STARTING MOTOR ASSEMBLY—32 Volt—Part 2—Type 2



1 - CONNECTOR ---------- 5L6426

2 - NUT ---------- 3H3680
1 - LOCKWASHER ---------- 9F4976
1 - WASHER (.031" THICK) - 7F3494
2 - WASHER (.093" THICK) - 9H3757

1 - BUSHING ---------- 3L3380
2 - SEAL ---------- 4M189

THE FOLLOWING REPAIR KITS ARE AVAILABLE FOR 1P2508 DRIVE ASSEM.:
C7N6098-KIT-- (cup) ------- 1
4S9459-KIT-(washer) ------ 1

1 - PLUG ---------- 2B4602
1 - WICK ---------- 4M1890

1 - PLUG ---------- 1H9721

1 - BUSHING ---------- 7F3506
(Parts of Frame Assem. 7M328)

1 - WASHER ---------- 7M327
1 - FRAME ASSEM. ---------- 7M328
3 - MACHINE SCREW ---- 4B1220
3 - LOCKWASHER ---------- 8H878
3 - WASHER ---------- 7F3529

1 - INSULATOR ---------- 6N3279
12 - MACHINE SCREW ----- 2F2860

12 - BRUSH ASSEM ------ 7M329
1 - INSULATOR ---------- 7M325
1 - ARMATURE ASSEM. - 7M8651

1 - COIL ASSEM ---------- 7M324

1 - PLUNGER ASSEM .. 4M1855
1 - RETAINER ------ 4M1828
1 - WASHER ------- 4M188
1 - BOOT ------- 4M1829
4 - SCREW ASSEM --- 6H3622
1 - SWITCH ASSEM --- 5L6427

6 - POLE ---------- 7F3488
3 - INSULATOR ---------- 1H2629
1 - SPACER ---------- 1M9971
1 - SEAL ---------- 2F6678
1 - BUSHING ---------- 1M9968
(Parts of Housing Assem. 7M333)

9M7609 - SPRING ------ 1
7M333 - HOUSING ASSEM -- 1
4M1827 - RETAINER ------ 1

9M7611 - RING ------- 1

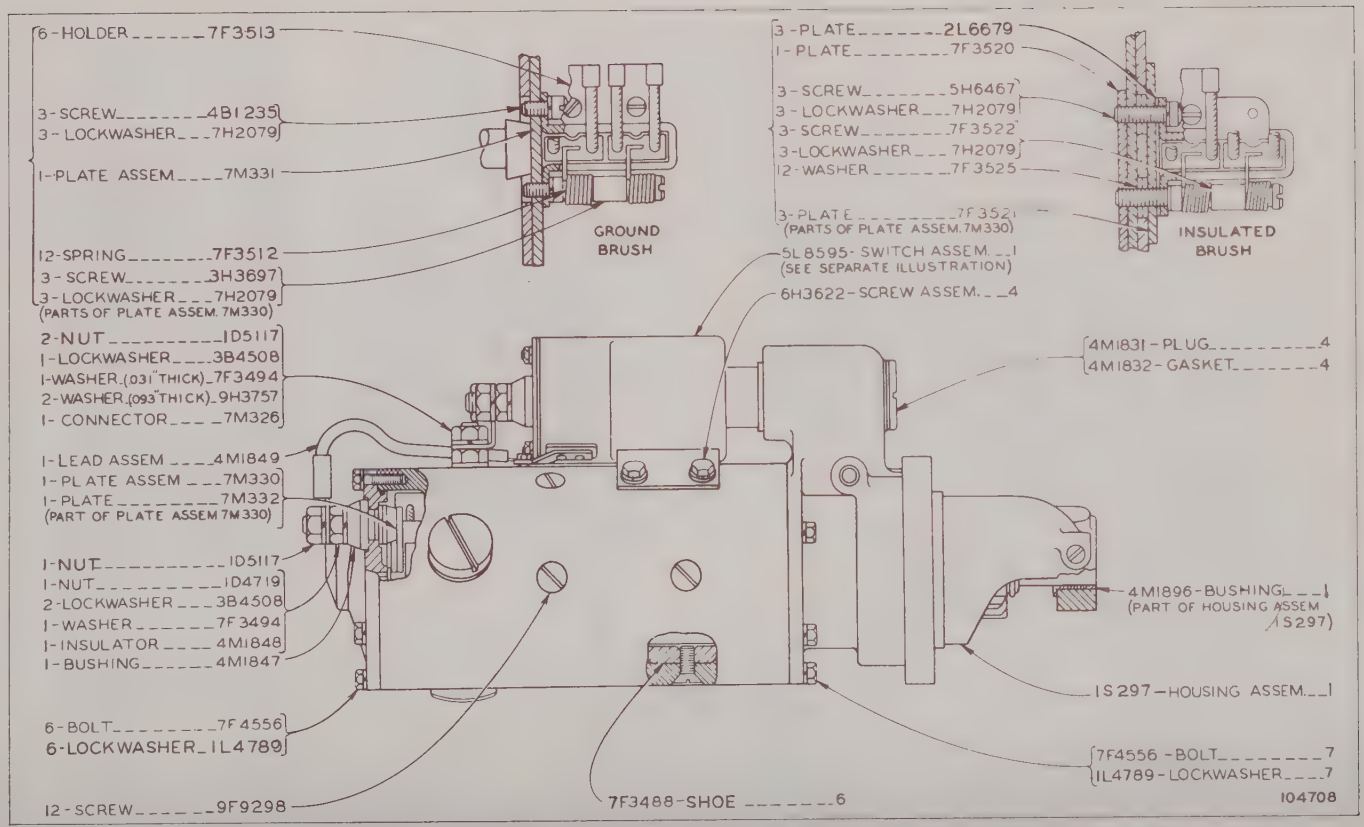
3F2617 - NUT ---------- 1
4M1853 - LEVER ASSEM ---- 1
4M1854 - SHAFT ------- 1
1H1023 SEAL (.369" DIAMETER) 1
2D6392 - SEAL (.239" DIAMETER) 1
9M7611 - RING ------- 1
4M1851 GASKET ------- 1
1P2508 - DRIVE ASSEM. ----- 1 C
(1894211)
-OR-
6N3826 - DRIVE ASSEM. ------ 1 C
(480321)

9S9774 - PINION ---------- 1
(Part of 1P2508 Assem.)

4M1833 - SCREW - (1.50" long) -- 5
7M336 - SCREW - (86" long) ----- 1
4L2729 - WASHER ---------- 1
2B4602 - PLUG ---------- 1
8H3705 - WICK ---------- 1
(Parts of 7M333 Assem.)

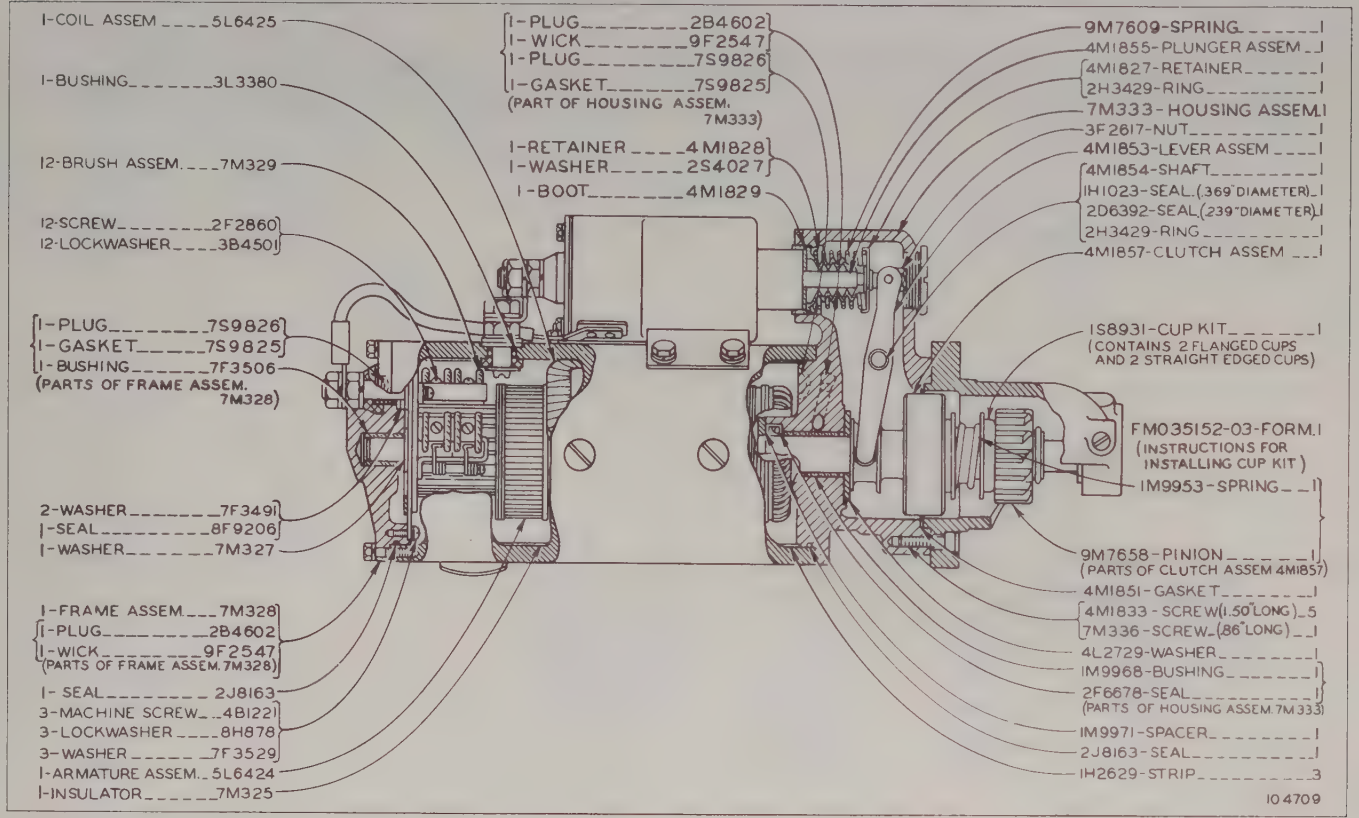
C INDICATES CHANGE

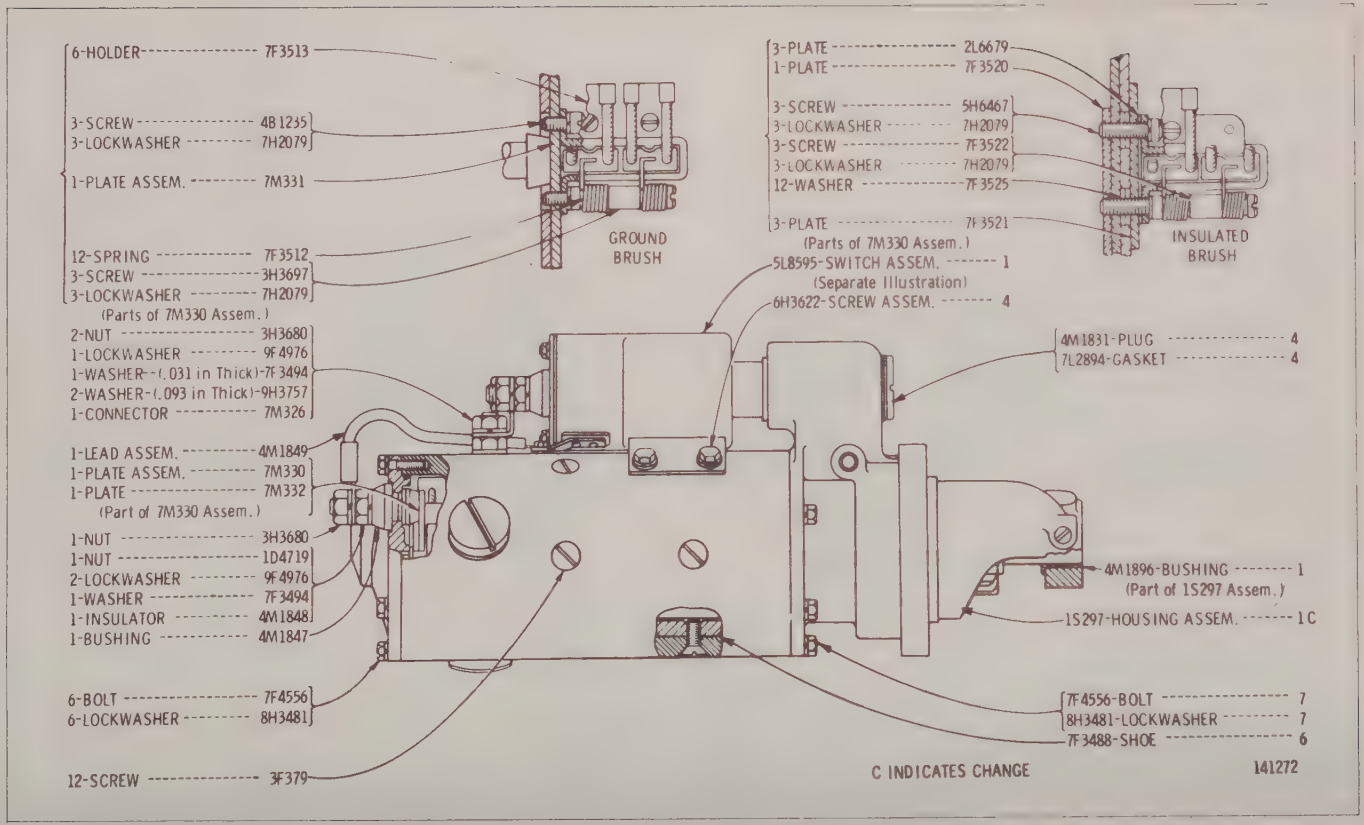
170405



5L4405 ELECTRIC STARTING MOTOR ASSEMBLY—32 Volt—Part 1—Type 1—Replaced by 8L8204 shown on Pages 66D through 67
Part of 6L1551 and 6L1550 Electric Starting Groups shown on Pages 65 & 69. 5L8595 Switch parts are shown on Pages 70 & 70-1

5L4405 ELECTRIC STARTING MOTOR ASSEMBLY—32 Volt—Part 2—Type 1—Replaced by 8L8204 shown on Pages 66D through 67
Part of 6L1551 and 6L1550 Electric Starting Groups shown on Pages 65 & 69



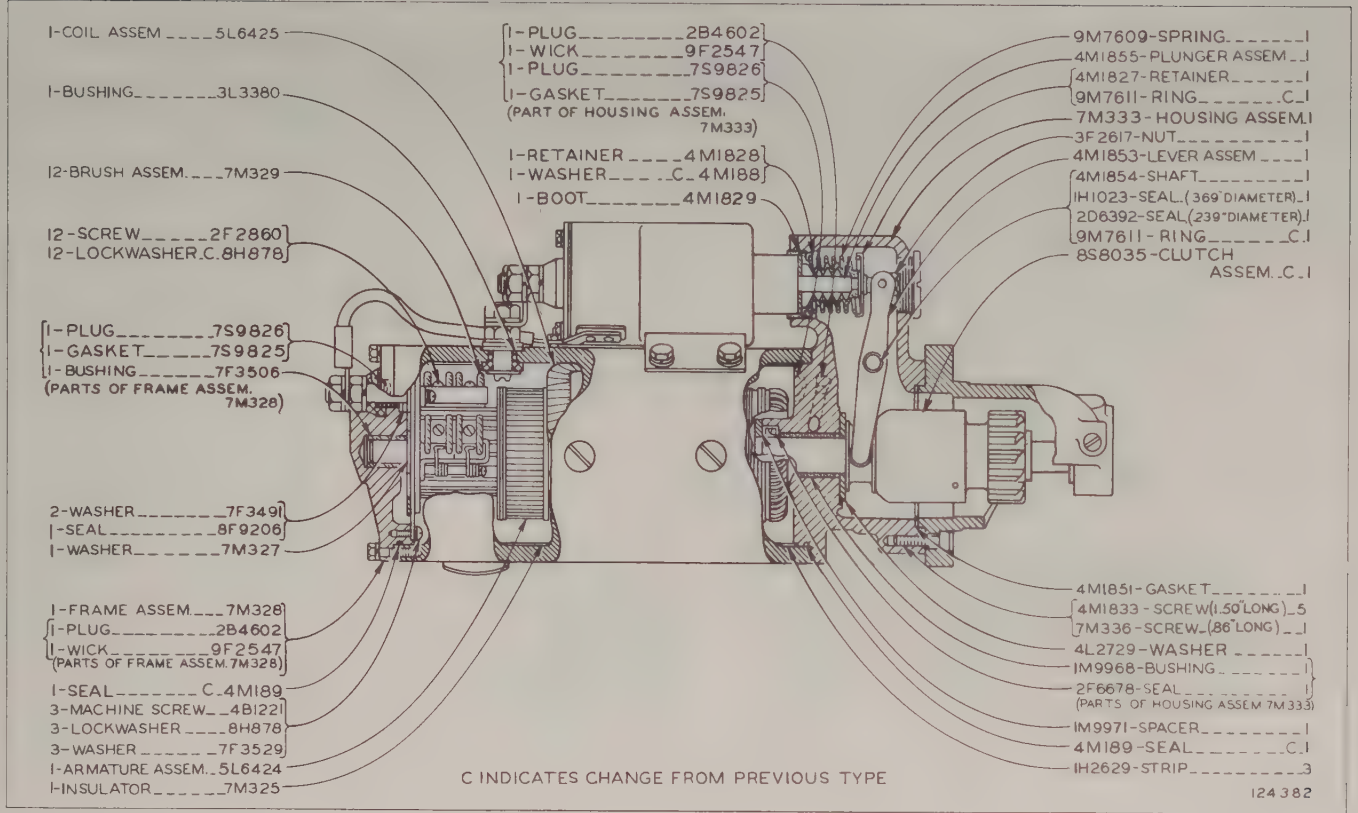


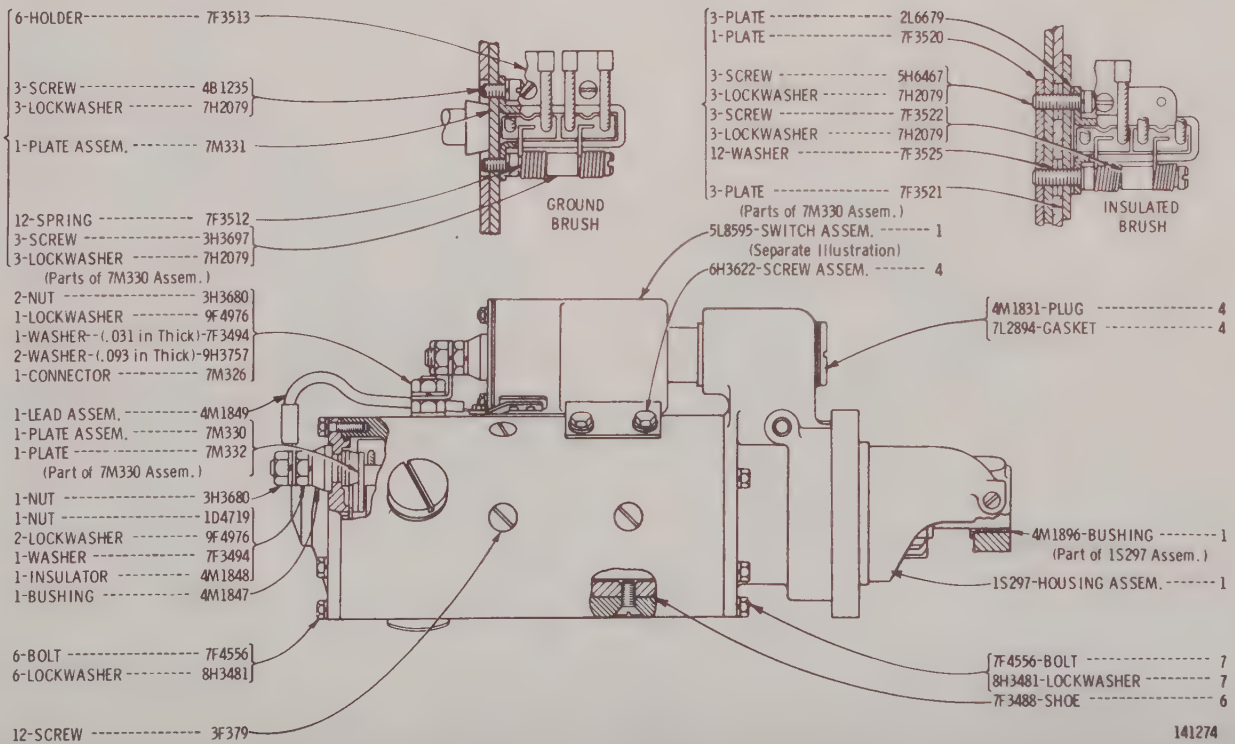
5L4405 MOTOR ASSEMBLY—32 Volt—Part 1—Type 2—Replaced by 8L8204 shown on Pages 66D through 67
Part of 6L1551 and 6L1550 Electric Starting Groups shown on Pages 64A, 64C and 69
5L8595 Switch parts are shown on Pages 70 & 70-1

5L4405 MOTOR ASSEMBLY—32 Volt—Part 2—Type 2—

Replaced by 8L8204 shown on Pages 66D through 67

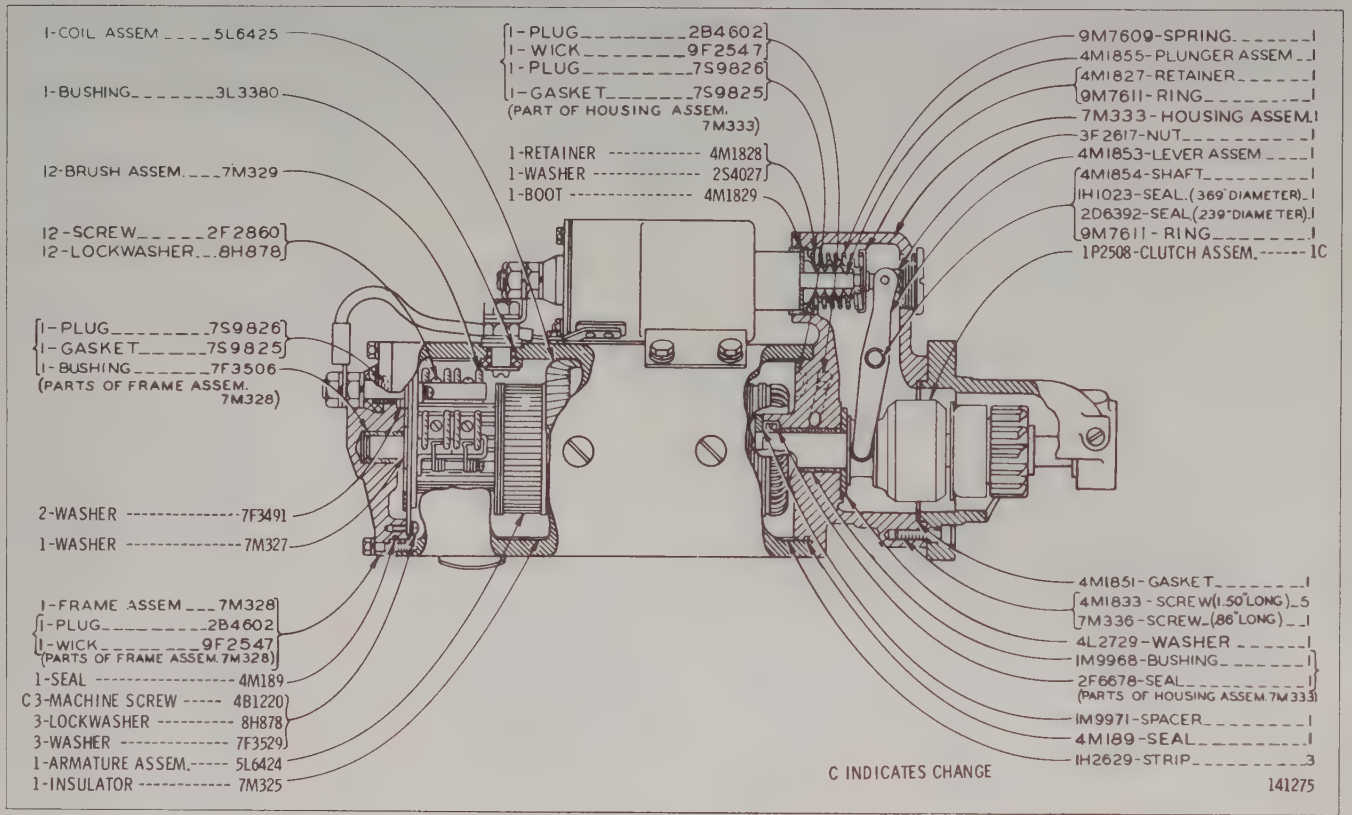
Part of 6L1551 & 6L1550 Electric Starting Groups shown on Pages 64A, 64C & 69

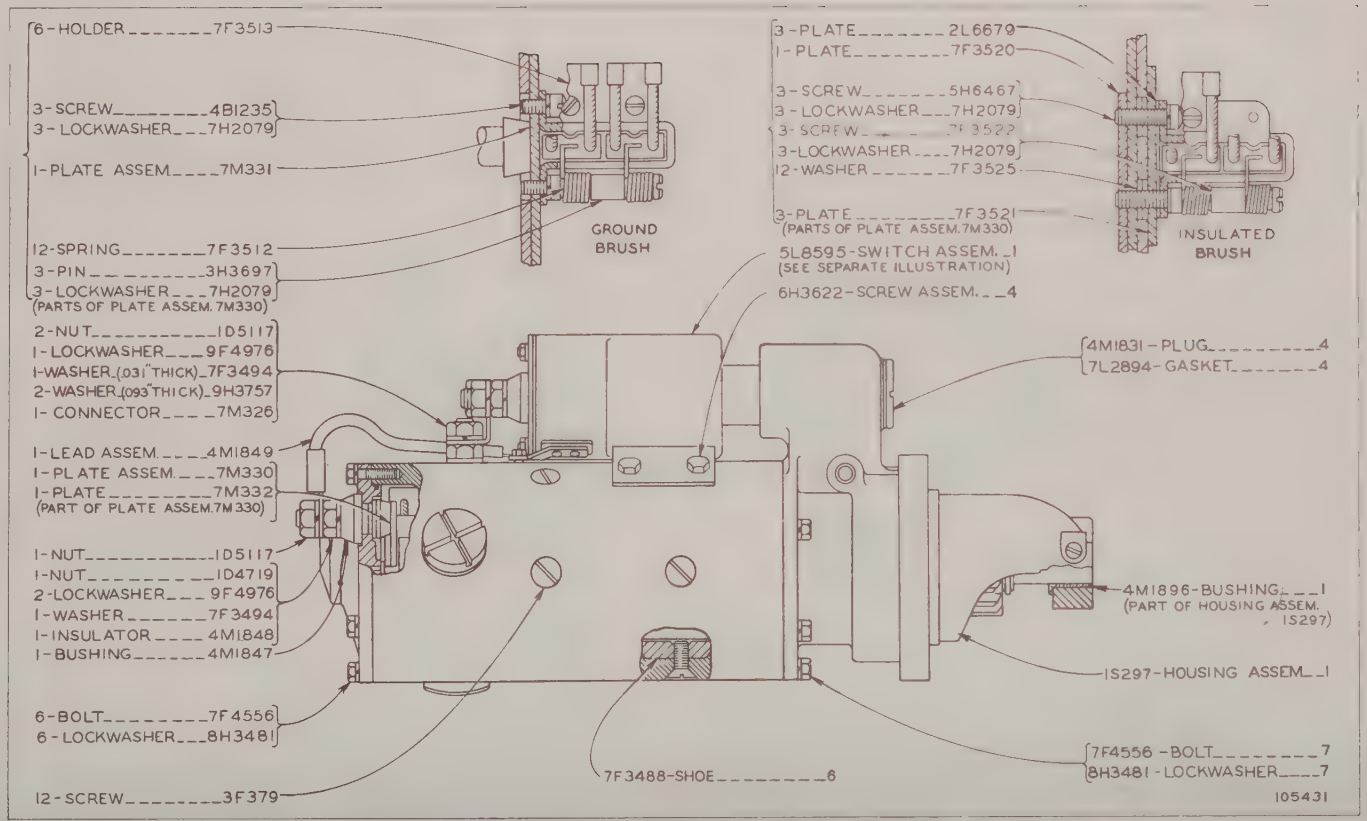




5L4405 MOTOR ASSEMBLY—32 Volt—Part 1—Type 3—Replaced by 8L8204 shown on Pages 66D through 67
Part of 6L1551 and 6L1550 Electric Starting Groups shown on Pages 64A, 64C and 69
5L8595 Switch parts are shown on Pages 70 & 70-1

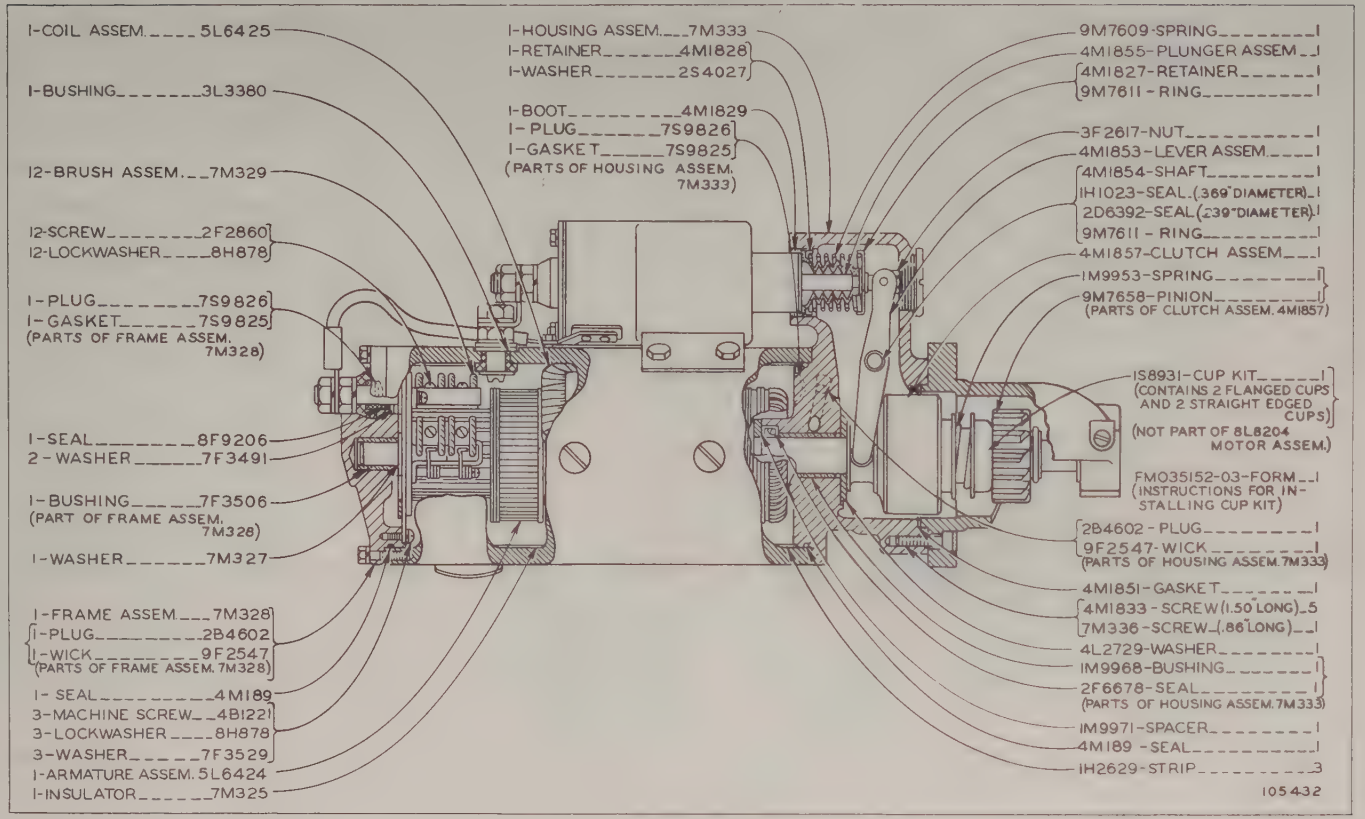
5L4405 MOTOR ASSEMBLY—32 Volt—Part 2—Type 3—Replaced by 8L8204 shown on Pages 66D through 67
Part of 6L1551 and 6L1550 Electric Starting Groups shown on Pages 64A, 64C and 69

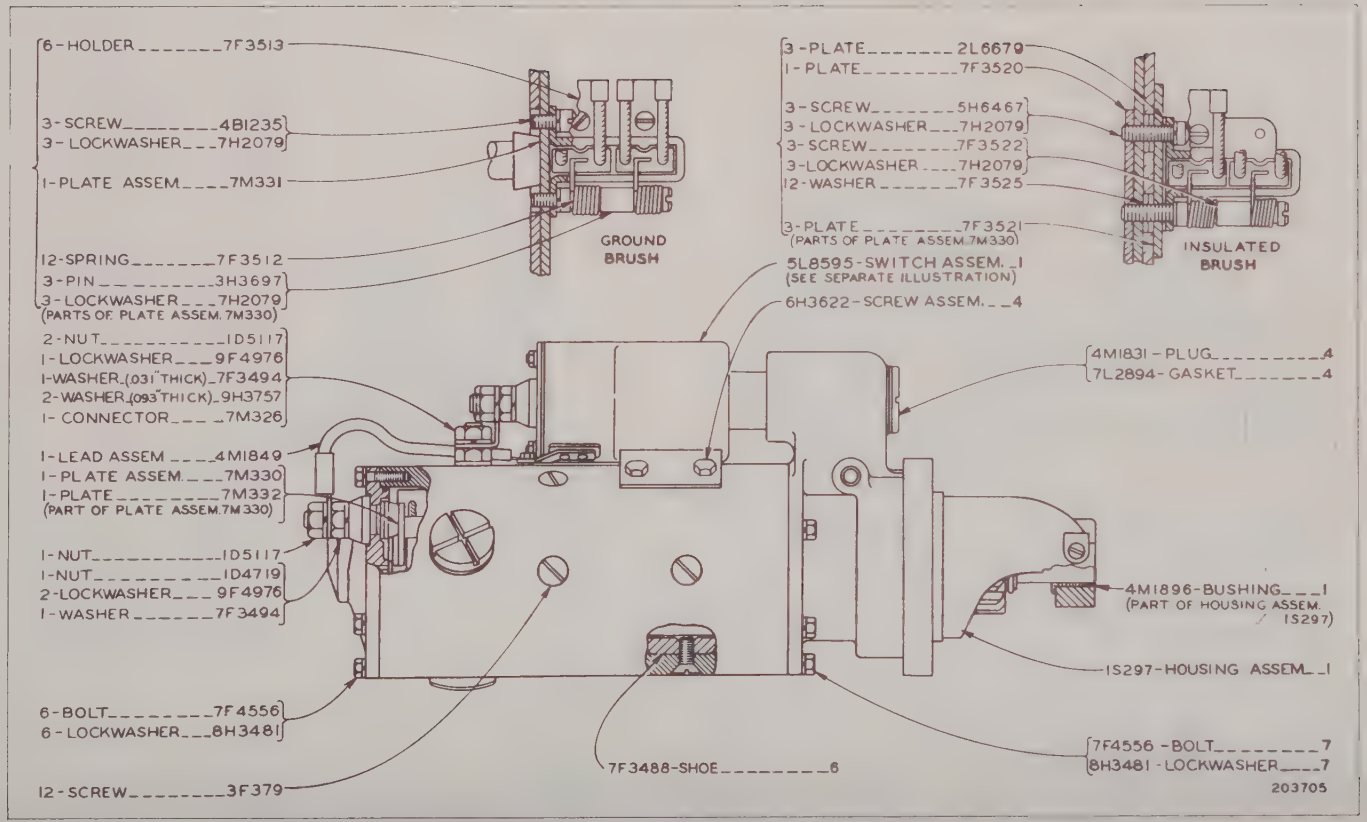




8L8204 ELECTRIC STARTING MOTOR ASSEMBLY—32 Volt—Field Installation—Part 1—Type 1
5L8595 Switch parts are shown on Pages 70 & 70-1

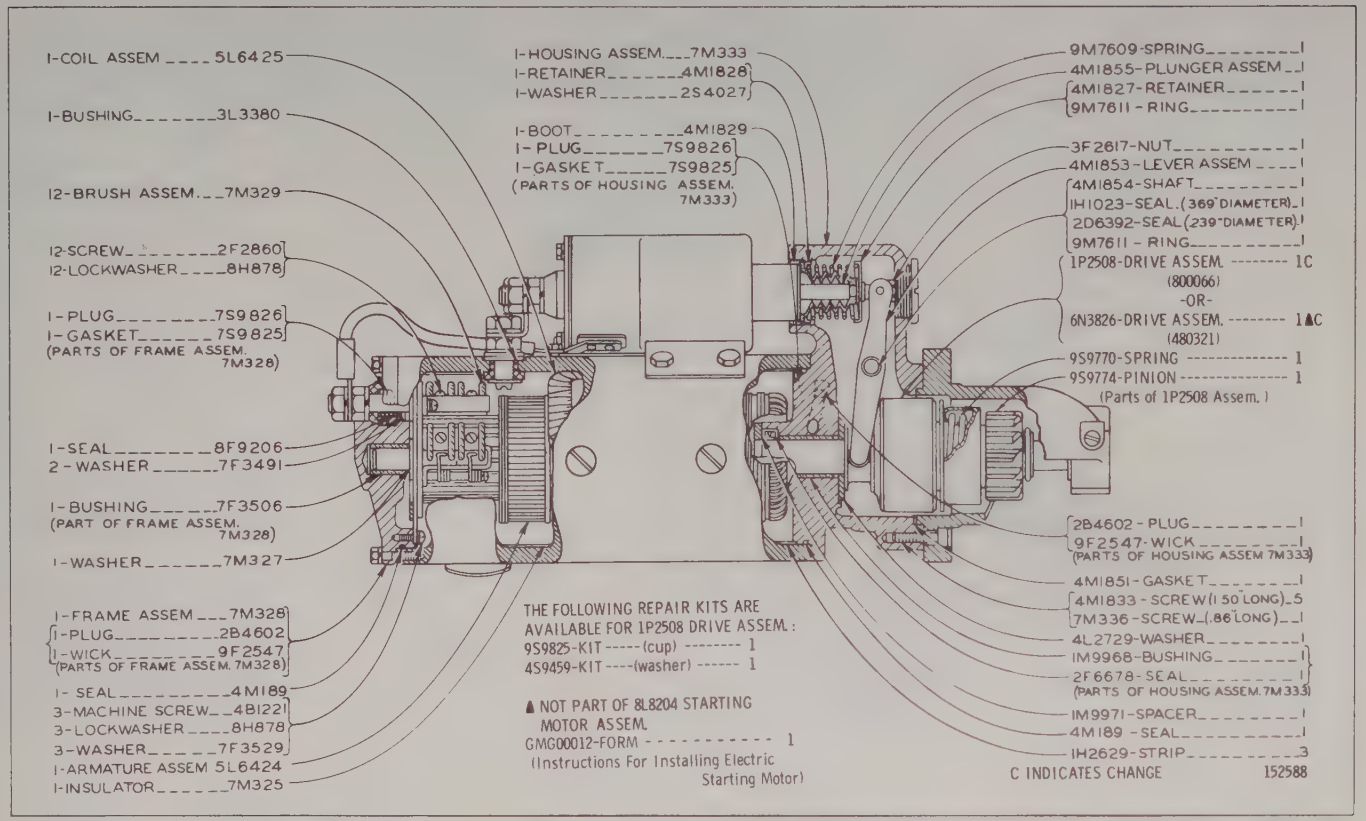
8L8204 ELECTRIC STARTING MOTOR ASSEMBLY—32 Volt—Field Installation—Part 2—Type 1

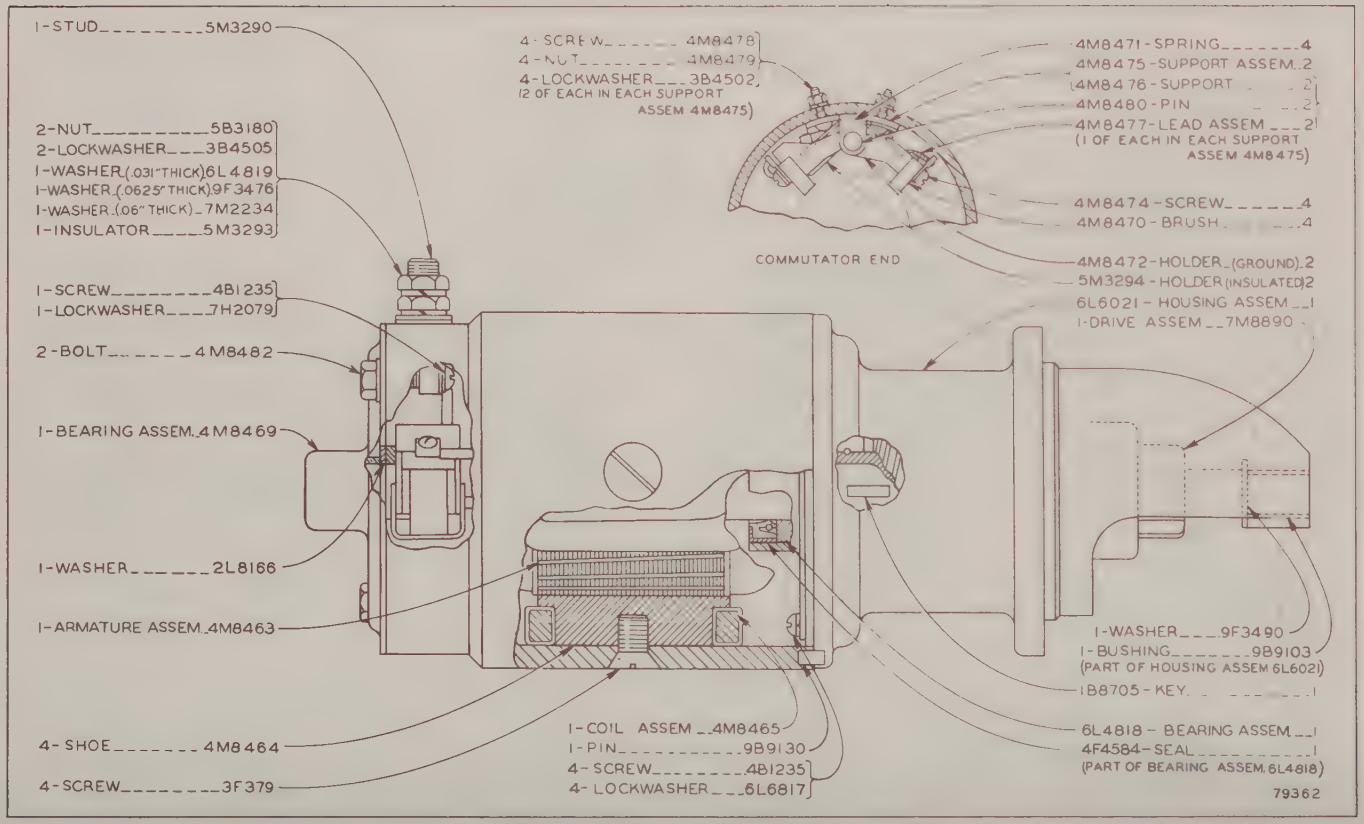




8L8204 ELECTRIC STARTING MOTOR ASSEMBLY—32 Volt—Field Installation—Part 1—Type 2
5L8595 Switch parts are shown on Pages 70 & 70-1

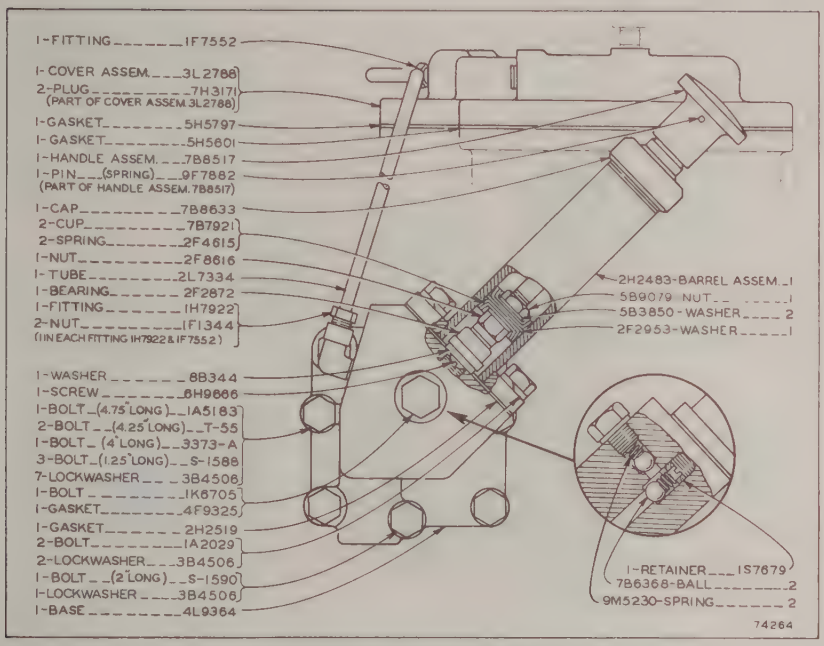
8L8204 ELECTRIC STARTING MOTOR ASSEMBLY—32 Volt—Part 2—Type 2
Field Installation



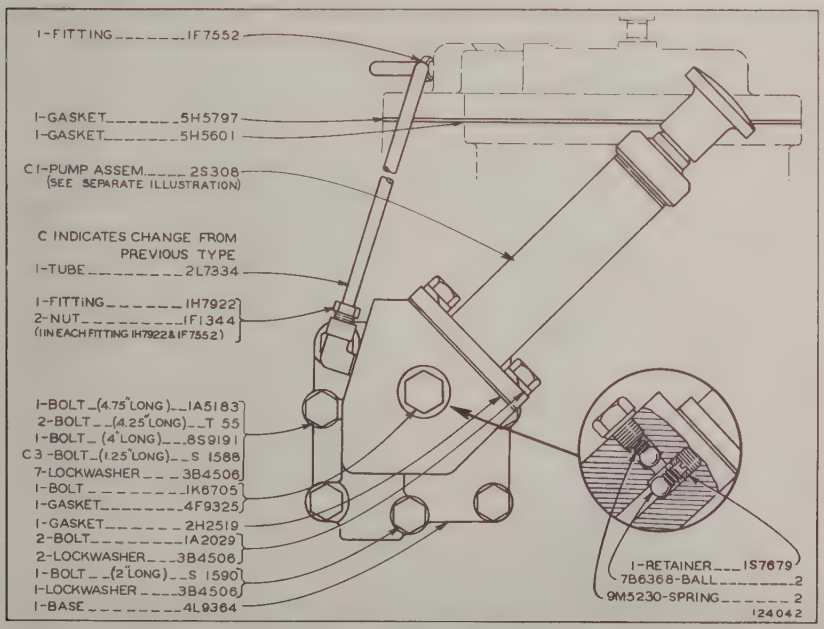


6L4665 ELECTRIC STARTING MOTOR ASSEMBLY—12 Volt

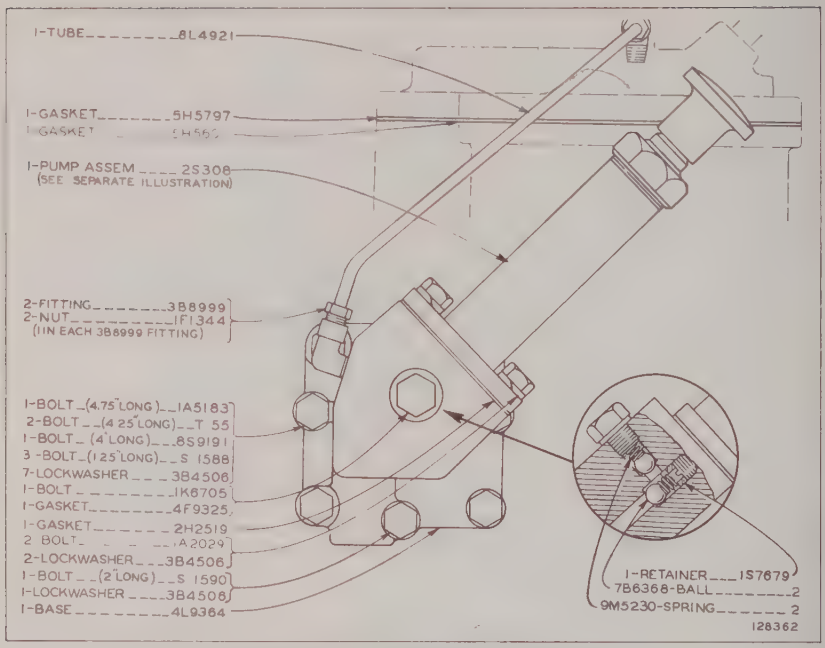
Part of 6L5978 Electric Starting Group shown on Page 64



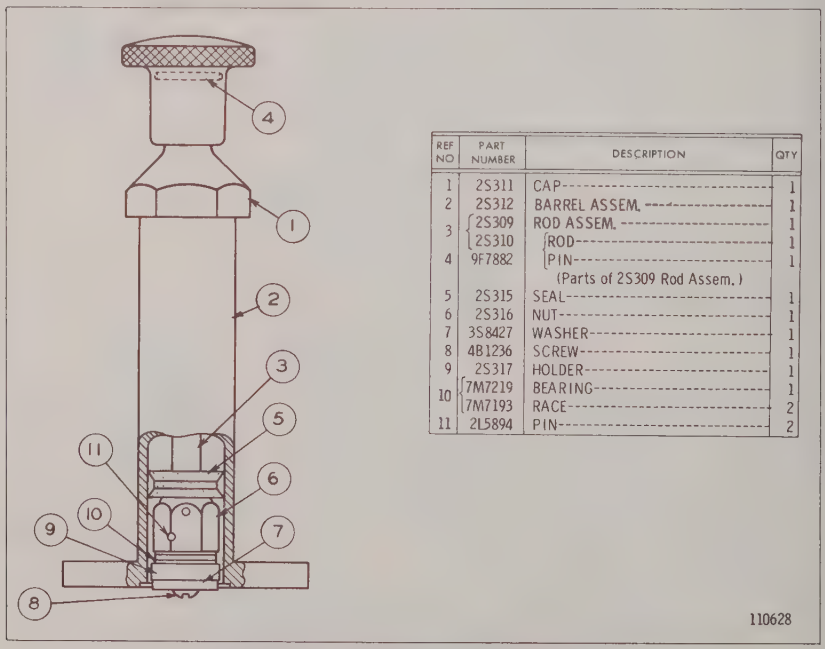
5L1621 FUEL PRIMING PUMP GROUP—Type 1
Serial No. 46B1558 to 46B3012 inclusive. Part of 5L5433, 5L5434, 5L5431 and 5L5432 Arrangements shown on Pages 64 and 75



5L1621 FUEL PRIMING PUMP GROUP—Type 2
Serial No. 46B1558 to 46B3012 inclusive. Part of 5L5433, 5L5434, 5L5431 and 5L5432 Arrangements shown on Pages 64 & 75
2S308 Pump parts are shown on Page 68B

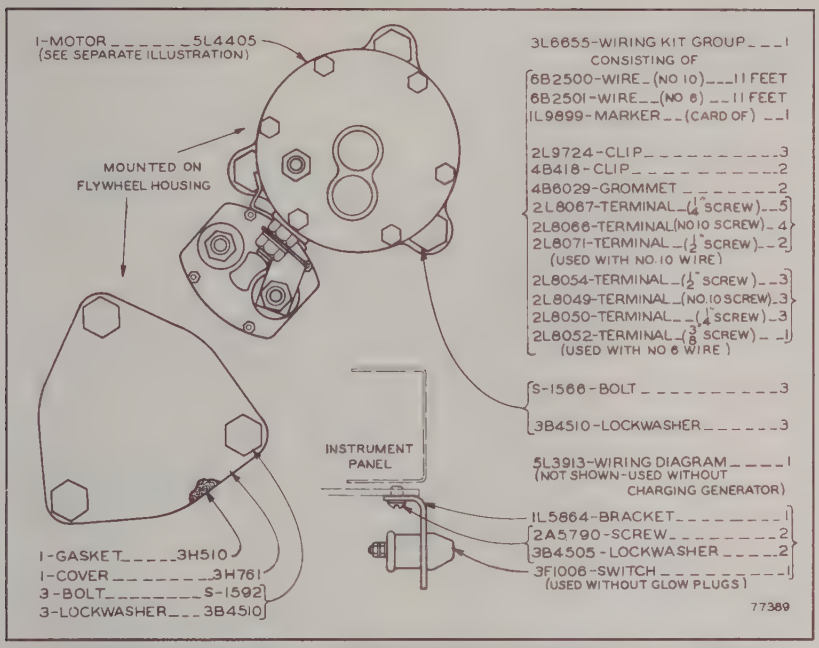


8L4943 FUEL PRIMING PUMP GROUP
Serial No. 46B3013—Up.
Part of 5L5433, 5L5434, 5L5431 & 5L5432 Arrangements listed on Pages 64 & 75

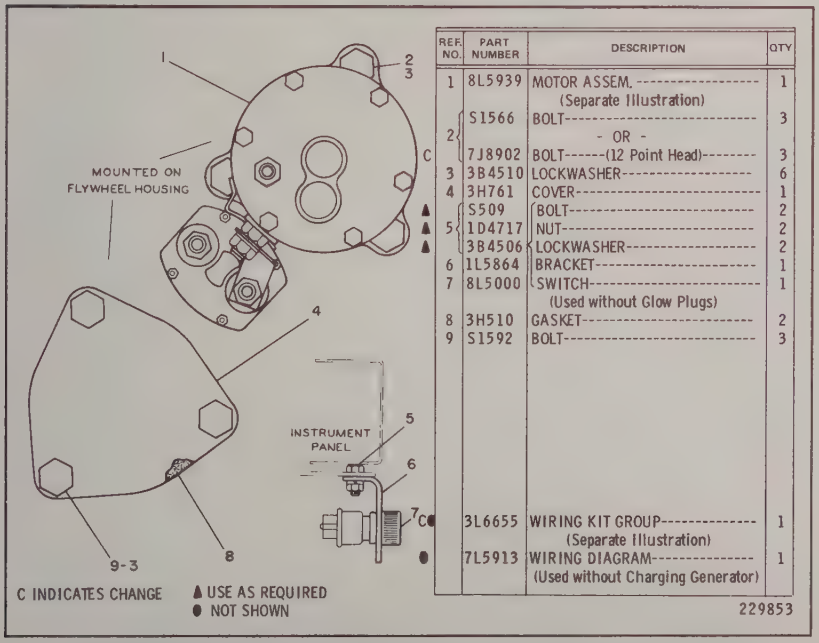


REF NO	PART NUMBER	DESCRIPTION	QTY
1	2S311	CAP	1
2	2S312	BARREL ASSEM.	1
3	2S309	ROD ASSEM.	1
	2S310	ROD	1
4	9F7882	PIN	1
		(Parts of 2S309 Rod Assem.)	
5	2S315	SEAL	1
6	2S316	NUT	1
7	3S8427	WASHER	1
8	4B1236	SCREW	1
9	2S317	HOLDER	1
10	7M7219	BEARING	1
	7M7193	RACE	2
11	2L5894	PIN	2

2S308 FUEL PRIMING PUMP ASSEMBLY
Part of 5L1621 Fuel Priming Pump Group shown on Page 68A

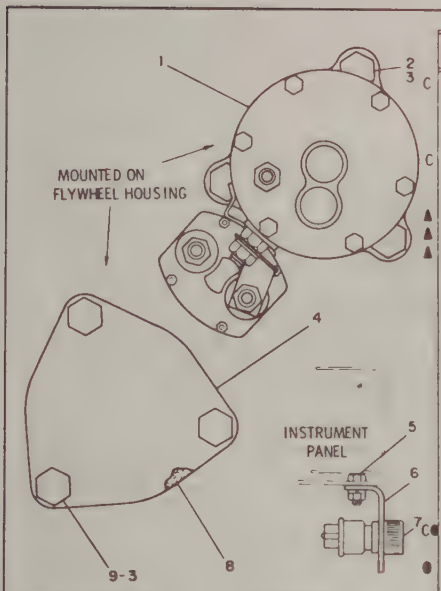


6L1550 SINGLE MOTOR ELECTRIC STARTING GROUP—32 Volt—Type 1
Part of 5L5434 Single Motor Electric Starting Arrangement shown on Page 64
5L4405 Motor parts are shown on Pages 66 and 66A



REF. NO.	PART NUMBER	DESCRIPTION	QTY
1	8L5939	MOTOR ASSEM. (Separate Illustration)	1
2	S1566	BOLT	3
		- OR -	
C	7J8902	BOLT-(12 Point Head)	3
3	3B4510	LOCKWASHER	6
4	3H761	COVER	1
▲ 5	S509	BOLT	2
▲	1D4717	NUT	2
▲	3B4506	LOCKWASHER	2
6	1L5864	BRACKET	1
7	8L5000	SWITCH (Used without Glow Plugs)	1
8	3H510	GASKET	2
9	S1592	BOLT	3
C ●	3L6655	WIRING KIT GROUP (Separate Illustration)	1
●	7L5913	WIRING DIAGRAM (Used without Charging Generator)	1

6L1550 SINGLE MOTOR ELECTRIC STARTING GROUP—32 Volt—Type 2
Part of 5L5434 Single Motor Electric Starting Arrangement shown on Page 64. 8L5939 Motor & 3L6655 Wiring Kit parts are shown on Pages 64D and 71C

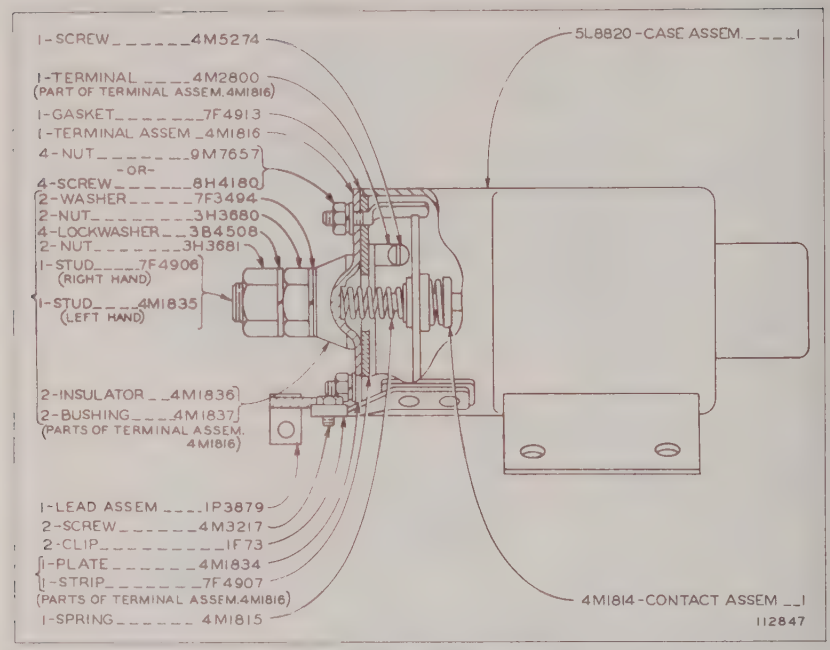


REF NO	PART NUMBER	DESCRIPTION	QTY
1	3T2779	MOTOR ASSEM.	1
2	S1566	BOLT	3
		- OR -	
C	7J8902	BOLT-----(12 Point Head)	3
3	3B4510	LOCKWASHER	6
4	3H761	COVER	1
▲	S509	BOLT	2
▲ 5	1D4717	NUT	2
▲	3B4506	LOCKWASHER	2
6	1L5864	BRACKET	1
7	8L5000	SWITCH (Used without Glow Plugs)	1
8	3H510	GASKET	2
9	S1592	BOLT	3
C	3L6655	WIRING KIT GROUP (Separate Illustration)	1
●	7L5913	WIRING DIAGRAM (Used without Charging Generator)	1

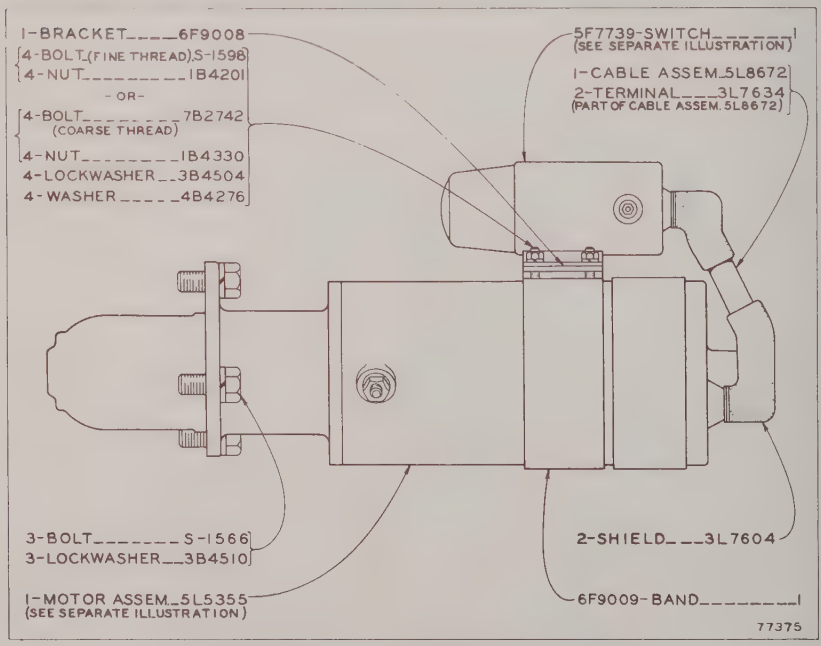
C INDICATES CHANGE ▲ USE AS REQUIRED ● NOT SHOWN

234513

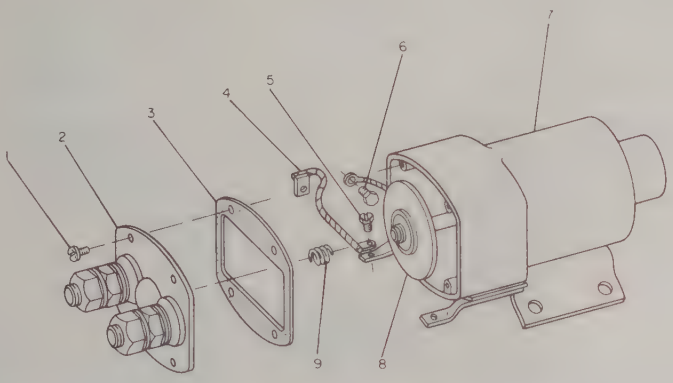
6L1550 SINGLE MOTOR ELECTRIC STARTING GROUP—32 Volt—Type 3
Part of 5L5434 Single Motor Electric Starting Arrangement shown on Page 64
3L6655 Wiring Kit parts are listed on Page 71C



5L8595 SOLENOID SWITCH ASSEMBLY—Type 1
Part of 8L5939, 5L4405 and 8L8204 Electric Starting Motor Assemblies shown on Pages 64D, 64E-1, 66, 66B, 66C-1, 66D and 66F



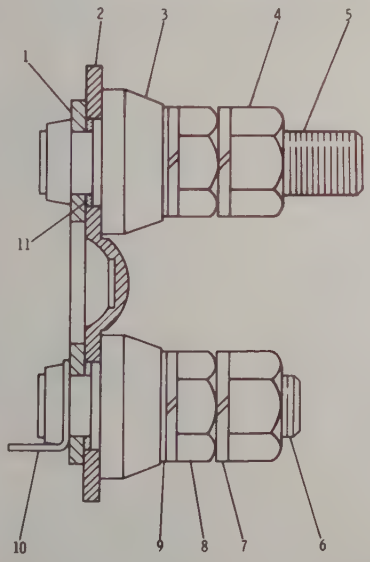
5L6691 STARTING MOTOR GROUP—32 Volt—Type 1
5L5355 Motor and 5F7739 Magnetic Switch parts are shown on Pages 71 and 72



	REF. NO.	PART NUMBER	DESCRIPTION	QTY
	1	8H4180	SCREW	4
C	2	7N1269	TERMINAL ASSEM. (Separate Illustration)	1
C	3	9S4490	GASKET	1
	4	1P3879	LEAD ASSEM.	1
	5	4M3217	SCREW	2
	6	4M5274	SCREW---6.38 mm(.25 in.) long	1
			- OR -	
C		5P9132	SCREW---4.76 mm(.187 in.) long	1
	7	5L8820	CASE ASSEM.	1
C	8	9G6770	CONTACT ASSEM.	1
	9	4M1815	SPRING	1

C INDICATES CHANGE 229023

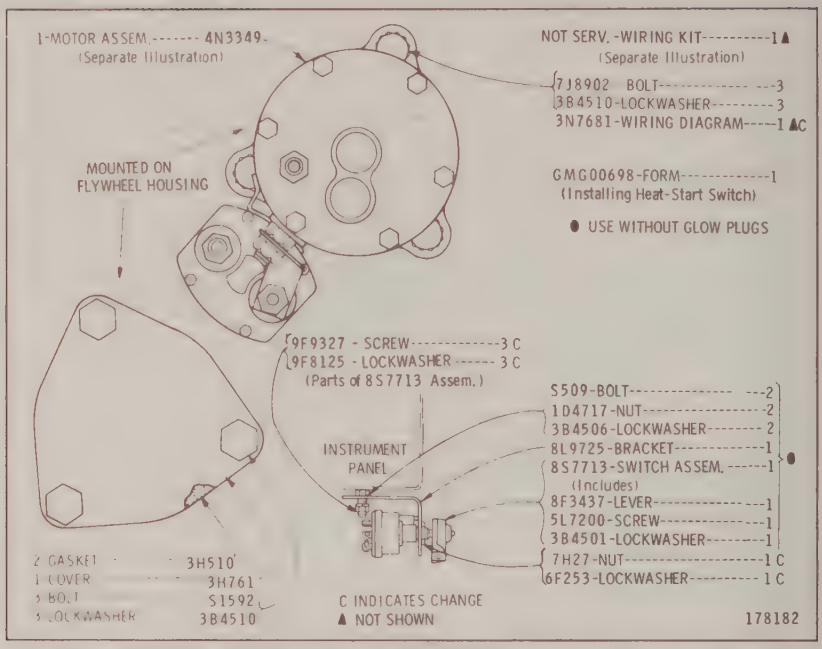
5L8595 SWITCH ASSEMBLY—Type 2
Part of 8L5939, 5L4405 & 8L8204 Electric Starting Motor Assemblies shown on Pages 64D, 64E-1, 66, 66B, 66C-1, 66D and 66F. 7N1269 Terminal parts are shown on Page 70-1



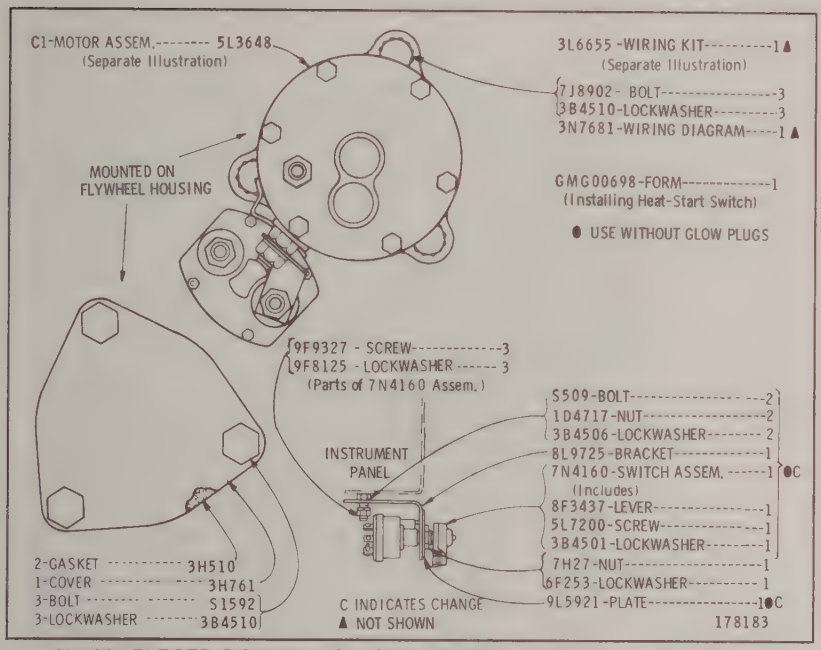
	REF. NO.	PART NUMBER	DESCRIPTION	QTY
	1	7F4907	STRIP	1
	2	4M1834	PLATE	1
	3	4M1836	INSULATOR	2
	4	3H3681	NUT	2
C	5	7F4906	STUD	1
	6	7N1271	TERMINAL ASSEM.	1
	7	3B4508	LOCKWASHER	4
	8	3H3680	NUT	2
	9	7F3494	WASHER	2
	10	4M2800	TERMINAL	1
	11	4M1837	BUSHING	2

C INDICATES CHANGE 217796

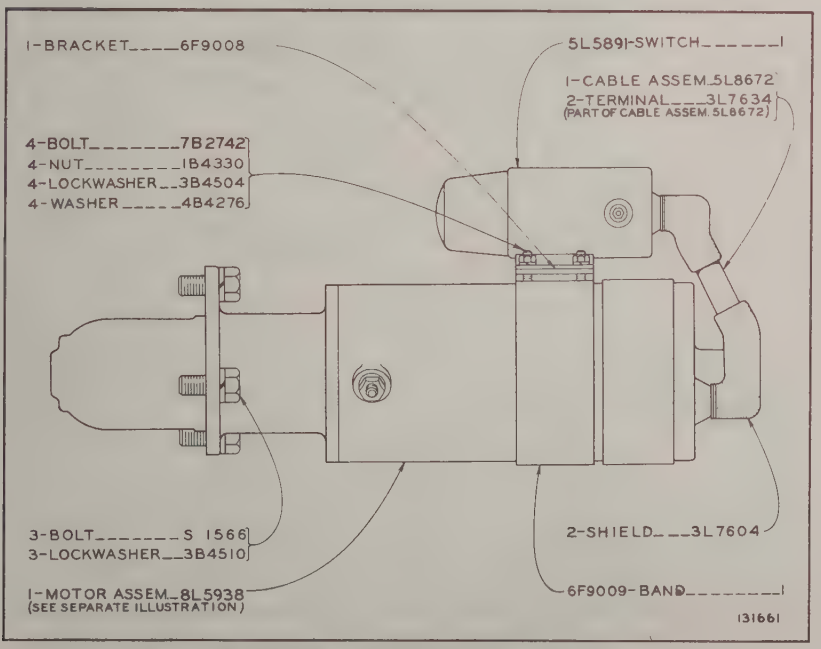
7N1269 TERMINAL ASSEMBLY
Part of 5L8595 Solenoid Switch Assembly shown on Page 70-1



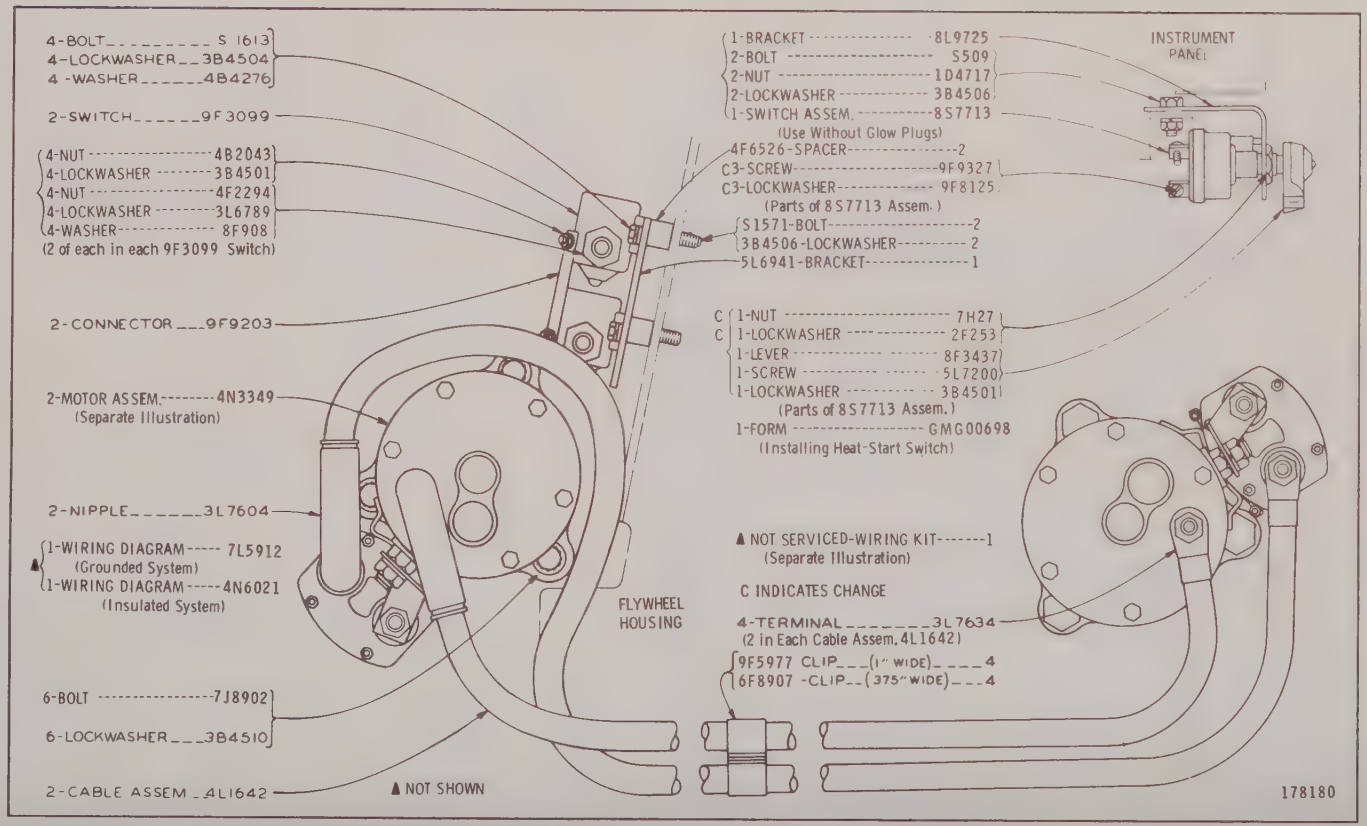
3N7305 ELECTRIC STARTING MOTOR GROUP—24 Volt—Single—Type 1
FOR USE IN TEMPERATURES OF 0 DEGREE F OR ABOVE. 4N3349 Motor and
3L6655 Wiring Kit parts are shown on Pages 71A and 71C



3N7305 ELECTRIC STARTING MOTOR GROUP—24 Volt—Single—Type 2
FOR USE IN TEMPERATURES OF 0 DEGREE F OR ABOVE. 5L3648 Motor and 3L6655 Wiring Kit parts are shown on Pages 71B-1, 71B-2 and 71C

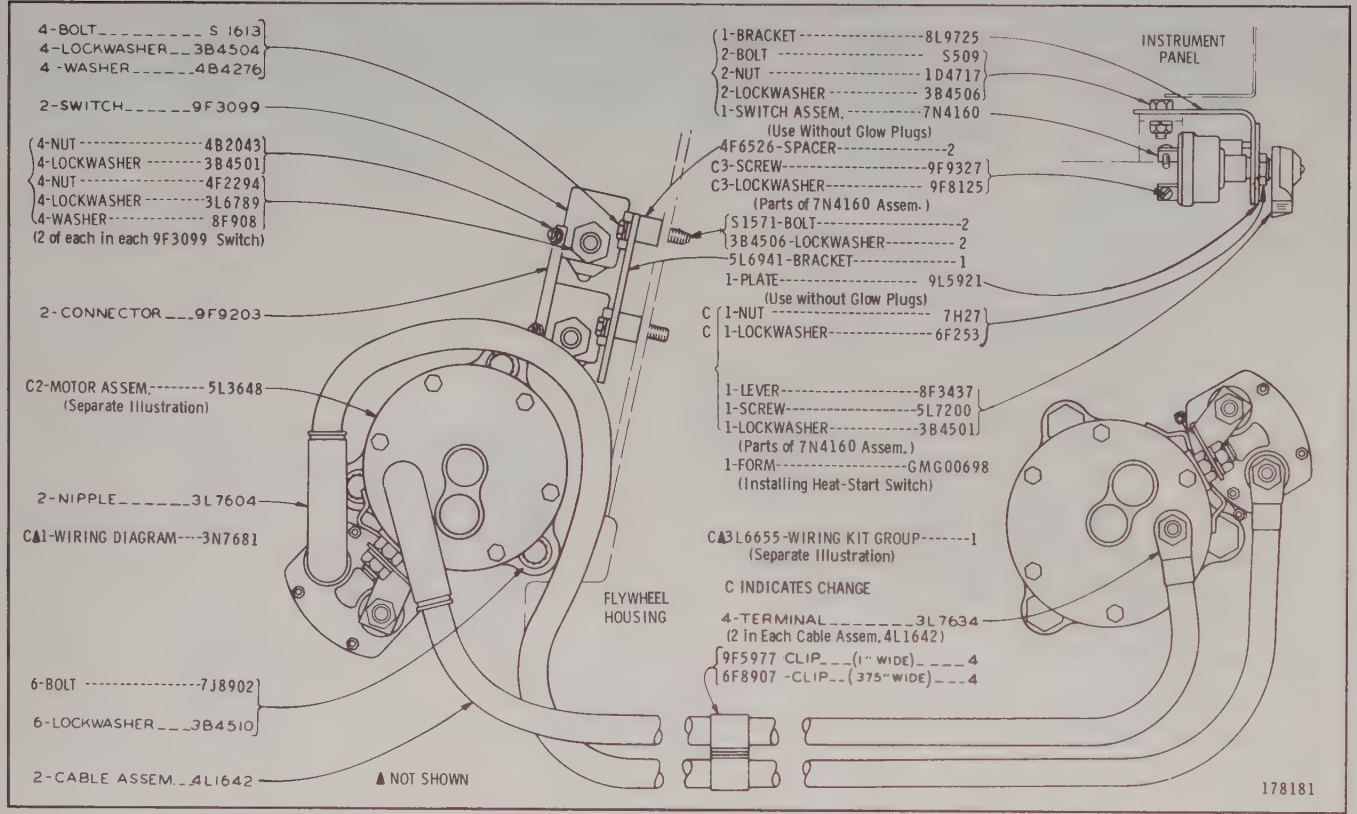


5L6691 STARTING MOTOR GROUP—32 Volt—Type 2
8L5938 Motor parts are shown on Page 128D



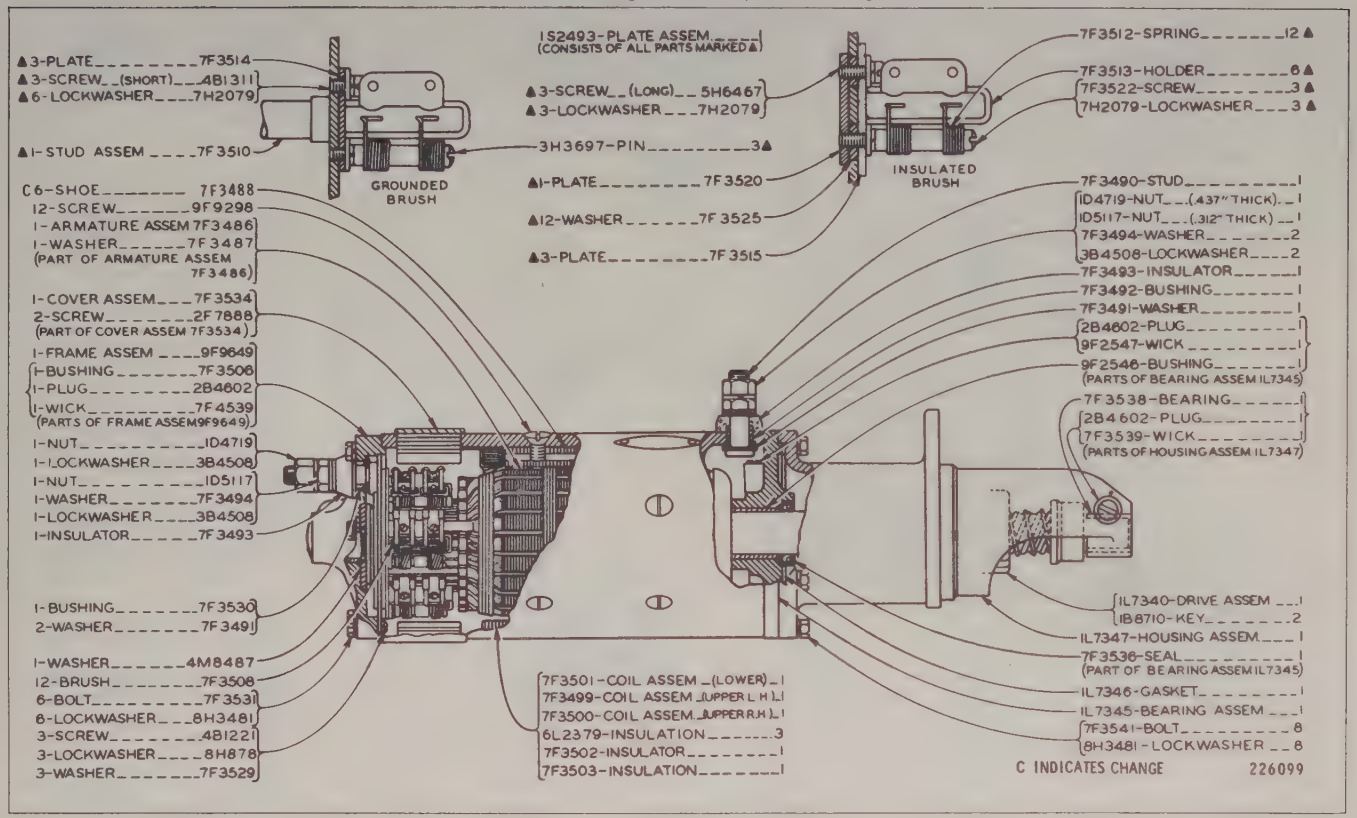
3N7306 DUAL ELECTRIC STARTING MOTOR GROUP—24 Volt—Type 1
4N3349 Motor and 3L6655 Wiring Kit parts are shown on Pages 71A & 71C

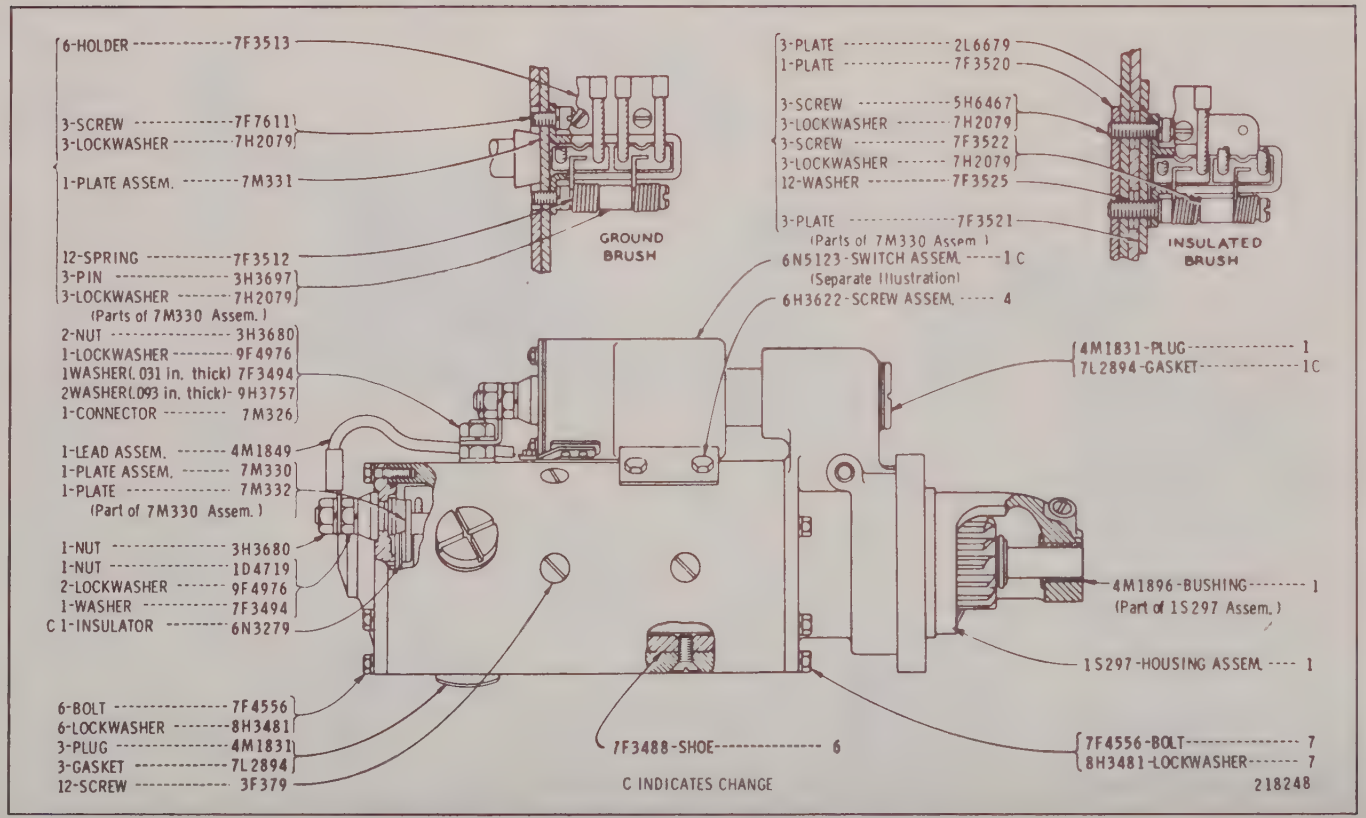
3N7306 DUAL ELECTRIC STARTING MOTOR GROUP—24 Volt—Type 2
5L3648 Motor and 3L6655 Wiring Kit parts are shown on Pages 71B-1, 71B-2 & 71C



5L5355 ELECTRIC STARTING MOTOR ASSEMBLY—32 Volt

Part of 5L6691 Starting Motor Group shown on Page 70



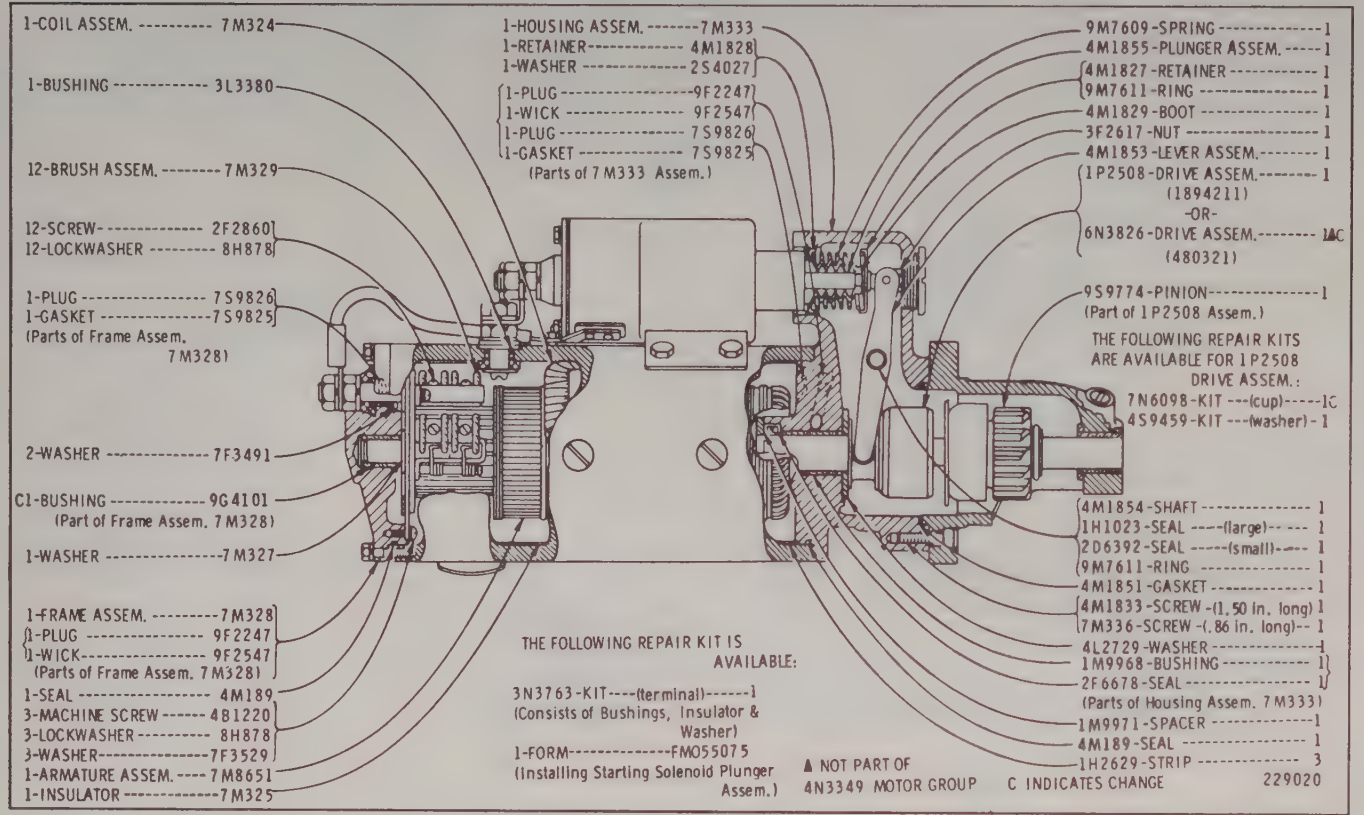


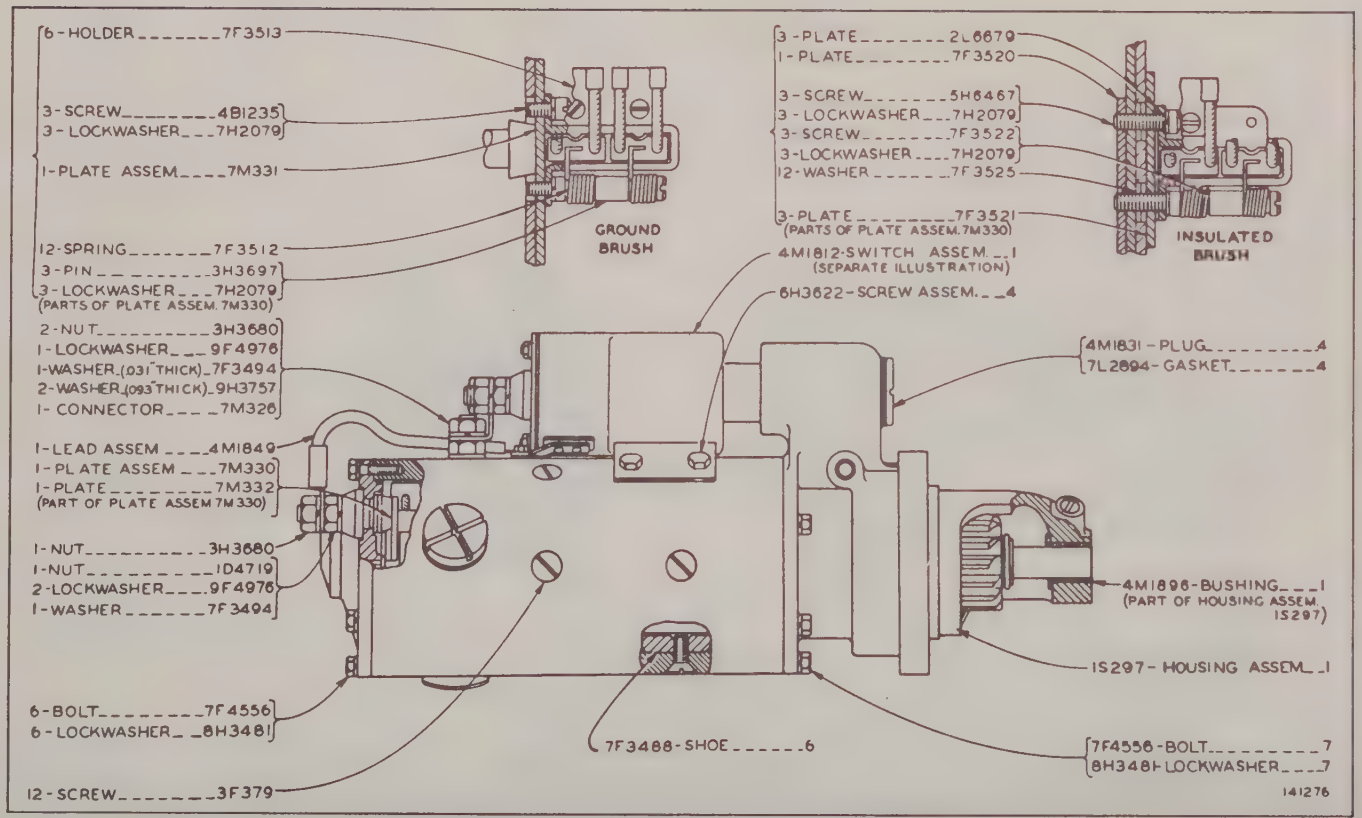
4N3349 ELECTRIC STARTING MOTOR GROUP—24 Volt—Part 1
Replaced by 6N9677 shown on Pages 71B-4, 71B-5 & 71B-6
Part of 3N7305 and 3N7306 Electric Starting Motor Groups shown on Pages 70A and 70B
6N5123 Switch parts are shown on Page 71D

4N3349 ELECTRIC STARTING MOTOR GROUP—24 Volt—Part 2

Replaced by 6N9677 shown on Pages 71B-4, 71B-5 and 71B-6

Part of 3N7305 and 3N7306 Electric Starting Motor Groups shown on Pages 70A and 70B



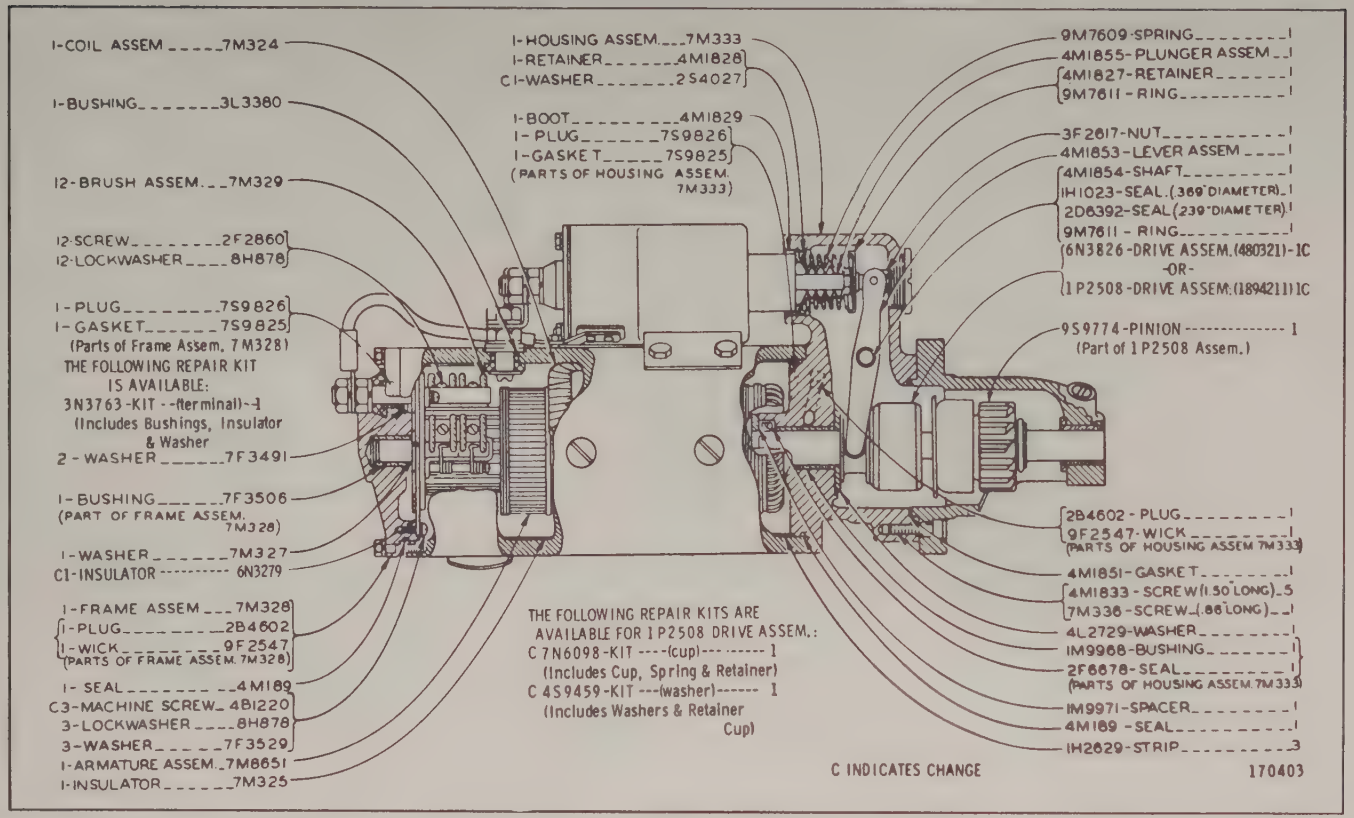


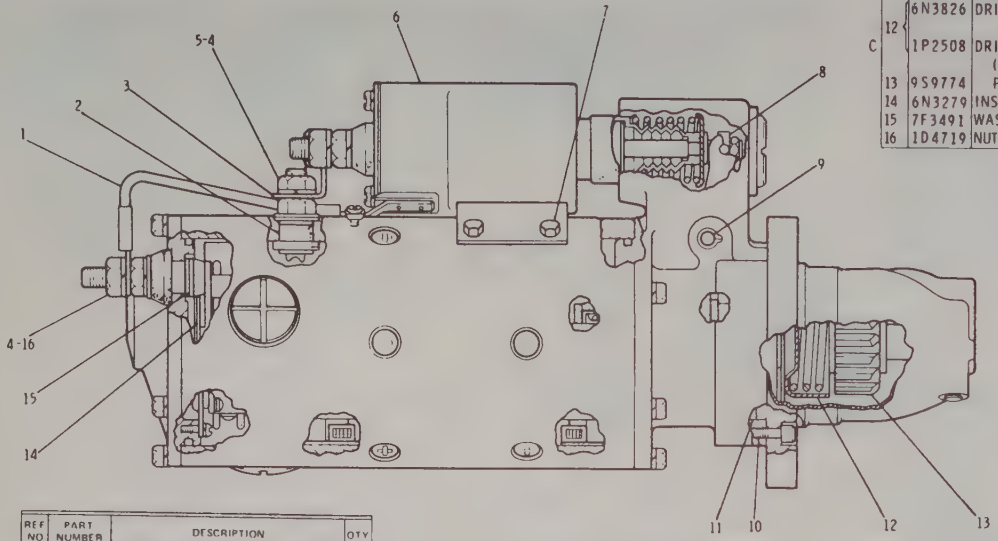
5L3648 ELECTRIC STARTING MOTOR ASSEMBLY—24 Volt—Part 1
Replaced by 6N9677 shown on Pages 71B-4, 71B-5 and 71B-6
Part of 3N7305 and 3N7306 Electric Starting Motor Groups shown on Pages 70A and 70C
4M1812 Switch parts are shown on Page 71D

5L3648 ELECTRIC STARTING MOTOR ASSEMBLY—24 Volt—Part 2

Replaced by 6N9677 shown on Pages 71B-4, 71B-5 and 71B-6

Part of 3N7305 and 3N7306 Electric Starting Motor Groups shown on Pages 70A and 70C





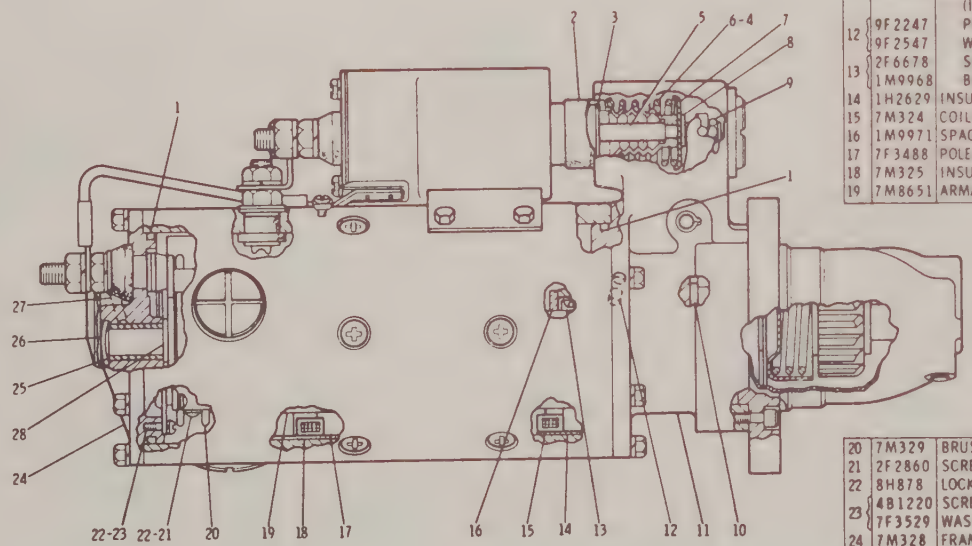
C	REF NO	PART NUMBER	DESCRIPTION	QTY
C	12	6N3826	DRIVE ASSEM. ------(480321)--	1
			- OR -	
		1P2508	DRIVE ASSEM. ------(1894211)-- (Includes)	1
	13	9S9774	PINION----------	1
	14	6N3279	INSULATOR----------	1
	15	7F3491	WASHER----------	2
	16	1D4719	NUT----------	1

REF NO	PART NUMBER	DESCRIPTION	QTY
1	4M1849	LEAD ASSEM. ----------	1
2	3L3380	BUSHING----------	1
3	7M326	CONNECTOR----------	1
4	3H3680	NUT------- ----------	3
	9F4976	LOCKWASHER----------	3
	7F3494	WASHER---.787 mm(.031 in.) thick	2
5	9H3757	WASHER---2.36 mm(.093 in.) thick	2
6	4M1812	SWITCH ASSEM. ----(solenoid)---- (Separate Illustration)	1

REF NO	PART NUMBER	DESCRIPTION	QTY
7	6H3622	BOLT----------	4
8	4M1853	LEVER ASSEM. ----------	1
9	4M1854	SHAFT----------	1
	1H1023	SEAL-------9.37 mm(.369 in.) I.D.	1
	2D6392	SEAL-------6.07 mm(.239 in.) I.D.	1
	9M7611	RING----------	1
10	4M1833	SCREW---------(long)----------	5
	7M336	SCREW---------(short)----------	1
11	4M1851	GASKET----------	1

C			
	THE FOLLOWING REPAIR KITS ARE AVAILABLE FOR 1P2508 ASSEM.:		
C	7N6098	KIT----------(cup)---------- (Includes cup, spring & retainer)	1
	4S9459	KIT----------(washer)---------- (Includes washers & retaining cup)	1

C INDICATES CHANGE 170157



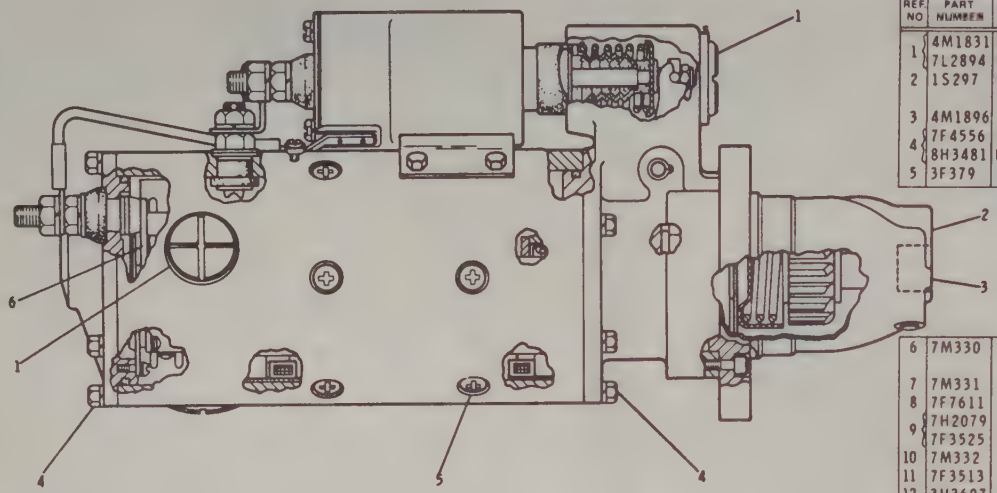
REF. NO	PART NUMBER	DESCRIPTION	QTY
1	4M189	SEAL	2
2	4M1829	BOOT	1
3	2S4027	WASHER	1
4	4M1828	RETAINER	1
5	9M7606	PLUNGER ASSEM.	1
6	9M7609	SPRING	1
7	4M1827	RETAINER	1
8	9M7611	RING	1
9	3F2617	NUT	1
10	4L2729	WASHER	1
11	7M333	HOUSING ASSEM. (Includes)	1
12	9F2247	PLUG	1
	9F2547	WICK	1
13	2F6678	SEAL	1
	1M9968	BUSHING	1
14	1H2629	INSULATOR	3
15	7M324	COIL ASSEM.	1
16	1M9971	SPACER	1
17	7F3488	POLE	6
18	7M325	INSULATOR	1
19	7M8651	ARMATURE ASSEM.	1
20	7M329	BRUSH ASSEM.	12
21	2F2860	SCREW	12
22	8H878	LOCKWASHER	15
23	4B1220	SCREW	3
	7F3529	WASHER	3
24	7M328	FRAME ASSEM. (Includes)	1
C 25	9G4101	BUSHING	1
26	7S9826	PLUG	1
	7S9825	GASKET	1
27	9F2247	PLUG	1
	9F2547	WICK	1
28	7M327	WASHER	1

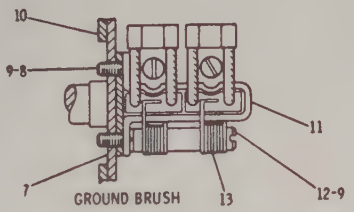
C INDICATES CHANGE

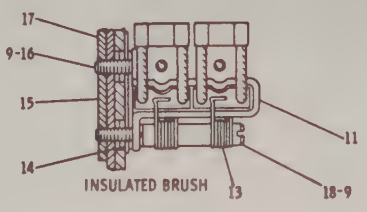
226125

6N9677 ELECTRIC STARTING MOTOR GROUP—24 Volt—Part 2 of 3—Field Installation

6N9677 ELECTRIC STARTING MOTOR GROUP—24 Volt—Part 3 of 3—Field Installation







REF NO	PART NUMBER	DESCRIPTION	QTY
1	4M1831	PLUG	4
	7L2894	GASKET	4
2	1S297	HOUSING ASSEM. (Includes)	1
3	4M1896	BUSHING	1
4	7F4556	BOLT	13
	8H3481	LOCKWASHER	13
5	3F379	SCREW	12
6	7M330	PLATE ASSEM. (Includes)	1
7	7M331	PLATE ASSEM.	1
8	7F7611	SCREW	3
9	7H2079	LOCKWASHER	12
	7F3525	WASHER	12
10	7M332	PLATE	1
11	7F3513	HOLDER	6
12	3H3697	PIN	3
13	7F3512	SPRING	12
14	7F3521	PLATE	3
15	7F3520	PLATE	1
16	5H6467	SCREW	3
17	2L6679	PLATE	3
18	7F3522	SCREW	3
	GMG02373	FORM (Installing electric starting motor)	1
		THE FOLLOWING REPAIR KIT IS AVAILABLE:	
	3N3763	KIT—(terminal) (Includes bushings, insulator & washers)	1

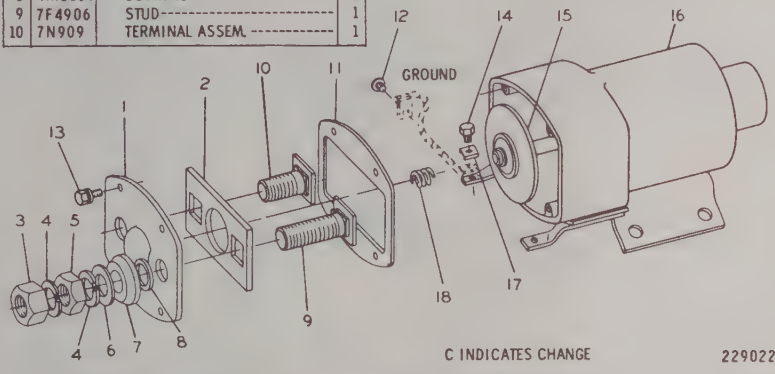
163778

Consists of:

	4S8784	Wire (No. 6)--2 Foot
	4S8785	Wire (No. 10)--10 Foot
	4S8787	Wire (No. 14)--10 Foot
1	2L8052	Terminal (3/8" Screw)
2	2L8054	Terminal (1/2" Screw) (Used with No. 6 Wire)
4	2L8066	Terminal (No. 10 Screw)
4	2L8068	Terminal (5/16" Screw)
1	2L8071	Terminal (1/2" Screw) (Used with No. 10 Wire)
4	2L8076	Terminal (No. 10 Screw)
2	2L8081	Terminal (1/2" Screw) (Used with No. 14 Wire)
2	9F9203	Connector (3-1/8" Long)
2	1H5166	Clip (3.50" Long)
1	4H8310	Strap
1	1L9899	Market (Wire Code)
3	2L9724	Clip (2.50" Long)
6	8L8413	Tie (5.50" Long)
2	2M5301	Terminal
2	3S2093	Tie (7.31" Long)
2	6N2569	Terminal

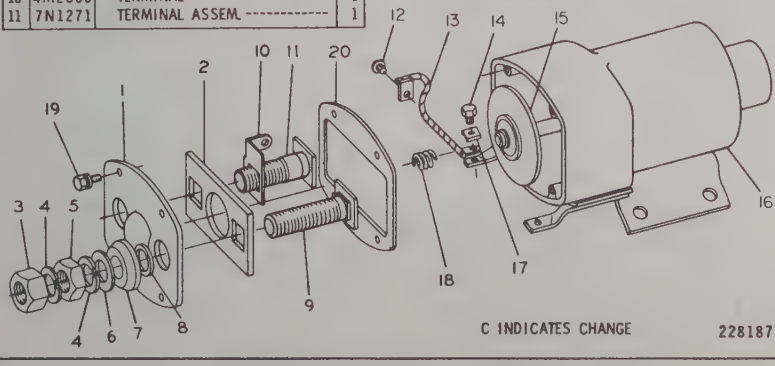
3L6655 WIRING KIT GROUP—Electric Starting System
Part of 3N7305 and 3N7306 Electric Starting Motor Groups
shown on Pages 70A & 70B

REF. NO.	PART NUMBER	DESCRIPTION	QTY
C 1	7N908	TERMINAL ASSEM. (Includes)	1
	4M1834	PLATE	1
2	7F4907	STRIP	1
3	3H3681	NUT	2
4	3B4508	LOCKWASHER	4
5	3H3680	NUT	2
6	7F3494	WASHER	2
7	4M1836	INSULATOR	2
8	4M1837	BUSHING	2
C 9	7F4906	STUD	1
10	7N909	TERMINAL ASSEM.	1
11	9S4490	GASKET	1
12	4M5274	SCREW-(large)	1
		- OR -	
C	5P9132	SCREW-(small)	1
13	9S4489	SCREW ASSEM.	4
14	4M3217	SCREW	2
15	4M1814	CONTACT ASSEM.	1
16	3P72	CASE ASSEM.	1
17	1F73	CLIP	2
18	4M1815	SPRING	1

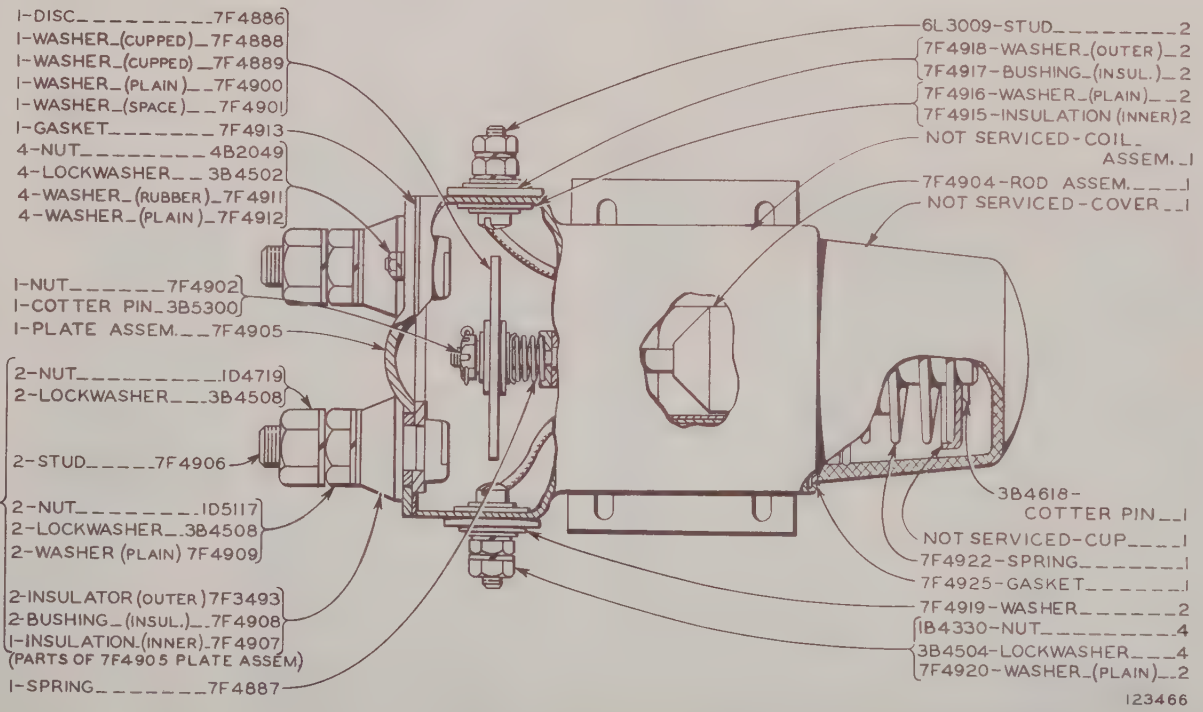


6N5123 SOLENOID SWITCH ASSEMBLY—24 Volt
Part of 4N3349 Starting Motor Group shown on Page 71A

REF. NO.	PART NUMBER	DESCRIPTION	QTY
C 1	7N1269	TERMINAL ASSEM.	1
	4M1834	PLATE	1
2	7F4907	STRIP	1
3	3H3681	NUT	2
4	3B4508	LOCKWASHER	4
5	3H3680	NUT	2
6	7F3494	WASHER	2
7	4M1836	INSULATOR	2
8	4M1837	BUSHING	2
9	7F4906	STUD	1
10	4M2800	TERMINAL	1
11	7N1271	TERMINAL ASSEM.	1
12	4M5274	SCREW-(hex head)	1
		- OR -	
C	5P9132	SCREW-(truss head)	1
13	1P3879	LEAD ASSEM.	1
14	4M3217	SCREW	2
C 15	9G6770	CONTACT ASSEM.	1
16	4M1813	CASE ASSEM.	1
17	1F73	CLIP	2
18	4M1815	SPRING	1
19	9M7657	NUT	4
		- OR -	
	9S4489	SCREW ASSEM.	4
20	9S4490	GASKET	4



4M1812 SOLENOID SWITCH ASSEMBLY
Part of 5L3648 & 6N9677 Electric Starting Motor Assembly shown on Pages 71B-1, 71B-2 & 71B-4

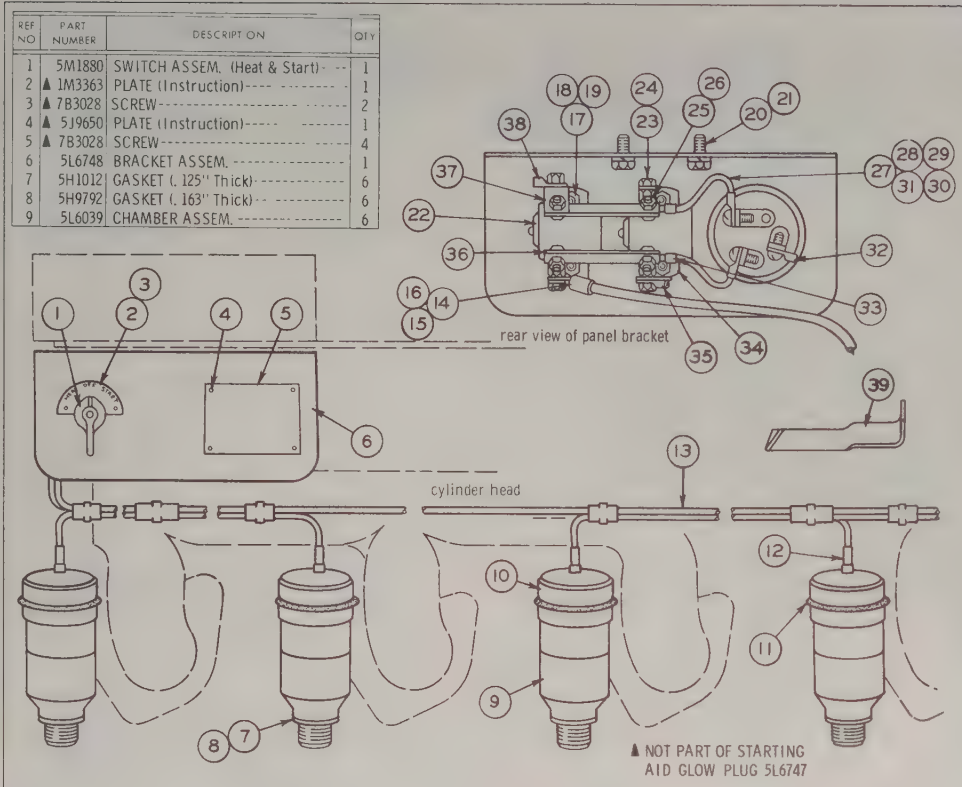


5F7739 MAGNETIC SWITCH

Part of 5L6691 Starting Motor Group shown on Page 70

5L6747 STARTING AID GLOW PLUG GROUP—32 Volt—Type 1
Serial No. 46B1558 to 46B1855 inclusive

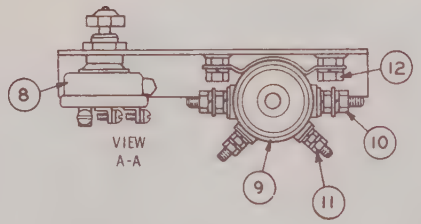
REF NO	PART NUMBER	DESCRIPTION	QTY
1	5M1880	SWITCH ASSEM. (Heat & Start)	1
2	▲ 1M3363	PLATE (Instruction)	1
3	▲ 7B3028	SCREW	2
4	▲ 5J9650	PLATE (Instruction)	1
5	▲ 7B3028	SCREW	4
6	5L6748	BRACKET ASSEM.	1
7	5H1012	GASKET (.125" Thick)	6
8	5H9792	GASKET (.163" Thick)	6
9	5L6039	CHAMBER ASSEM.	6

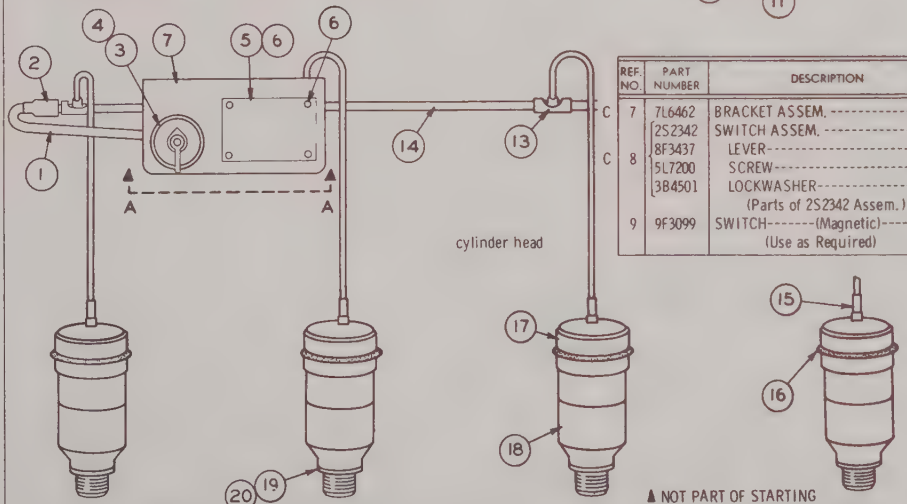


REF NO	PART NUMBER	DESCRIPTION	QTY
10	2L7142	RETAINER	6
11	6F8146	SEAL ("O" Ring)	6
12	6L6682	GLOW PLUG	6
13	5L6749	LEAD ASSEM.	1
14	2L8060	TERMINAL	1
		-or-	
15	9F9353	TERMINAL	1
16	9F5384	INSULATOR	1
		(Parts of Lead Assem. 5L6749)	
17	1B4330	NUT	4
18	3B4504	LOCKWASHER	4
19	4B4276	WASHER	4
		(Use as Required)	
20	2H3755	BOLT	2
21	3B4505	LOCKWASHER	2
22	9F3099	SWITCH (Magnetic)	2
		(Use as Required)	
23	2F7885	NUT	4
24	3S4773	WASHER	4
25	4B2043	NUT	4
26	3B4501	LOCKWASHER	4
		(2 each in Switch 9F3099)	
	6L4407	WIRING KIT GROUP	1
		Consisting of:	
27	6B2501	WIRE (No. 6 Gauge)	11 Feet
28	6B2500	WIRE (No. 10 Gauge)	6 Feet
29	6L4408	SPLICE	1
30	2L9724	CLIP	5
31	2L8054	TERMINAL	2
32	2L8067	TERMINAL	3
33	2L8052	TERMINAL	2
34	9F8292	CONNECTOR	1
35	2L8066	TERMINAL	5
36	9F9203	CONNECTOR	2
37	9F8294	CONNECTOR	1
38	2L8069	TERMINAL	2
39	4H8310	STRAP	1
		(Use as Required)	

77374

REF NO.	PART NUMBER	DESCRIPTION	QTY
1	7L6612	WIRE ASSEM.	1
2	7L6614	SHELL	1
	3M6018	TERMINAL	1
	2R1033	WASHER	
		(Parts of 7L6612 Assem.)	
▲ 3	1M3363	PLATE---------(Instruction)------	1
▲ 4	7B3028	SCREW	2
▲ 5	5J9650	PLATE---------(Instruction)------	1
▲ 6	7B3028	SCREW	4





REF NO.	PART NUMBER	DESCRIPTION	QTY
C 7	7L6462	BRACKET ASSEM.	1
	2S2342	SWITCH ASSEM.	1
C 8	8F3437	LEVER	1
	5L7200	SCREW	1
	3B4501	LOCKWASHER	1
		(Parts of 2S2342 Assem.)	
9	9F3099	SWITCH-------(Magnetic)-----	1
		(Use as Required)	

REF NO.	PART NUMBER	DESCRIPTION	QTY
	4F2294	NUT	?
10	3L6789	LOCKWASHER	2
	8F908	WASHER	2
11	4B2043	NUT	2
	3B4501	LOCKWASHER	2
		(Part of 9F3099 Switch)	
	1B4330	NUT	2
12	3B4504	LOCKWASHER	2
	4B4276	WASHER	2
		(Use as required)	
C 13	4K8977	NUT	3
	4B4281	WASHER	3
	3S5159	LEAD ASSEM.	1
C 14	2M5301	TERMINAL	6
	2R1023	CONTACT	1
		(Parts of 3S5159 Assem.)	
C 15	3S9632	GLOW PLUG	6
16	6F8146	SEAL	6
17	2L7142	RETAINER	6
18	5L6039	CHAMBER ASSEM.	6
19	5H1012	GASKET--------(.125" Thick)-----	6
20	5H9792	GASKET--------(.163" Thick)-----	6
	6L4407	WIRING KIT GROUP	1
		Consisting of:	
	6B2501	WIRE----(No. 6 Gauge)--11 Feet	
	6B2500	WIRE----(No. 10 Gauge)---6 Feet	
	6L4408	SPLICE	1
	2L9724	CLIP	5
	2L8054	TERMINAL	2
	2L8067	TERMINAL	3
	2L8052	TERMINAL	2
	9F8292	CONNECTOR	1
	2L8066	TERMINAL	5
	9F9203	CONNECTOR	2
	9F8294	CONNECTOR	1
	2L8069	TERMINAL	2
	4H8310	STRAP	1
		(Not Shown)	

▲ NOT PART OF STARTING AID GLOW PLUG 5L6747

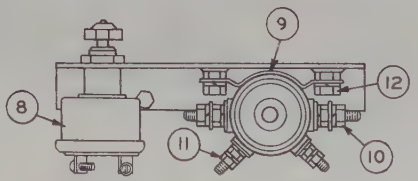
C INDICATES CHANGE FROM PREVIOUS TYPE

129747

5L6747 STARTING AID GLOW PLUG GROUP—32 Volt—Type 2
Serial No. 46B1558 to 46B1855 inclusive

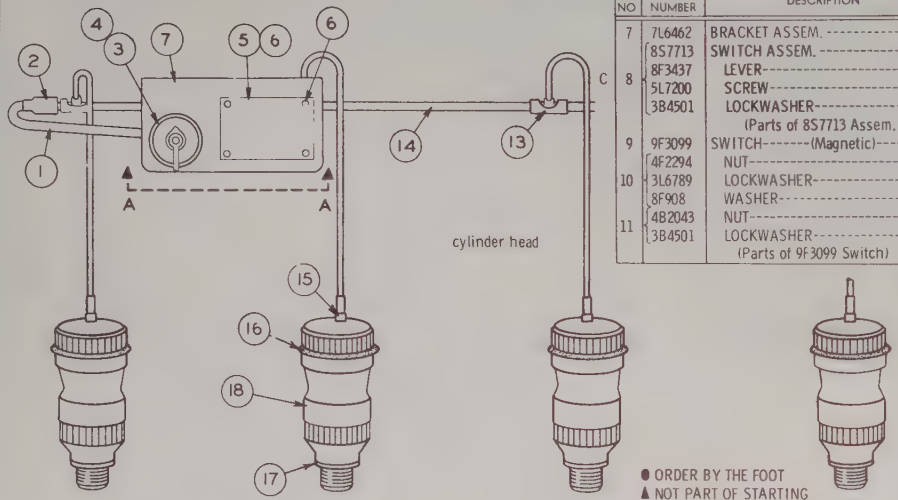
5L6747 STARTING AID GLOW PLUG GROUP—32 Volt—Type 3
Serial No. 46B1558 to 46B1855 inclusive

REF. NO.	PART NUMBER	DESCRIPTION	QTY
1	7L6612	WIRE ASSEM.	1
	7L6614	SHELL	1
2	3M6018	TERMINAL	1
	2R1033	WASHER	
		(Parts of 7L6612 Assem.)	
▲ 3	1M3363	PLATE—(Instruction)	1
▲ 4	7B3028	SCREW	2
▲ 5	5J9650	PLATE—(Instruction)	1
▲ 6	7B3028	SCREW	4



VIEW A-A

REF NO	PART NUMBER	DESCRIPTION	QTY
7	7L6462	BRACKET ASSEM.	1
	8S7713	SWITCH ASSEM.	1
	8F3437	LEVER	1
8	5L7200	SCREW	1
	3B4501	LOCKWASHER	1
		(Parts of 8S7713 Assem.)	
9	9F3099	SWITCH—(Magnetic)	1
	4F2294	NUT	2
10	3L6789	LOCKWASHER	2
	8F908	WASHER	2
11	4B2043	NUT	2
	3B4501	LOCKWASHER	2
		(Parts of 9F3099 Switch)	

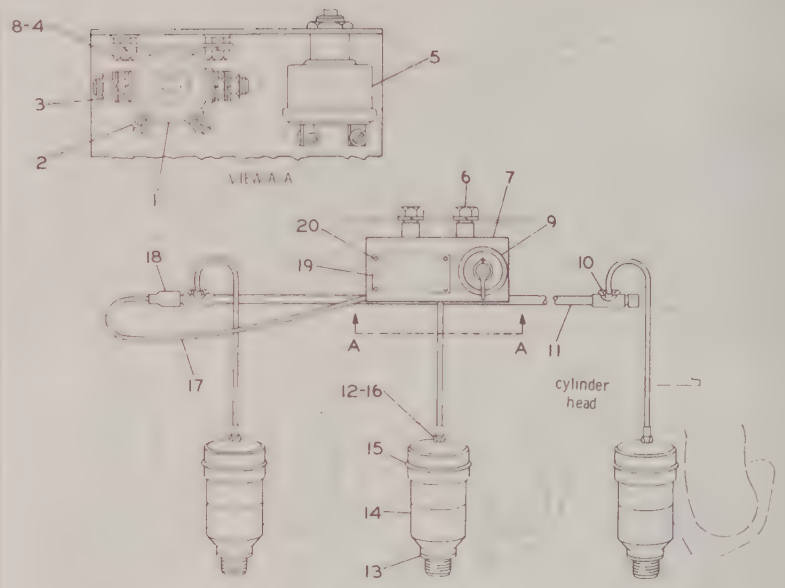


C INDICATES CHANGE FROM PREVIOUS TYPE

● ORDER BY THE FOOT
▲ NOT PART OF STARTING AID GLOW PLUG 5L6747

REF. NO.	PART NUMBER	DESCRIPTION	QTY
	1B4330	NUT	2
12	3B4504	LOCKWASHER	2
	4B4276	WASHER	2
		(Use as required)	
	4K8977	NUT	3
13	4B4281	WASHER	3
	3S5159	LEAD ASSEM.	1
14	2M5301	TERMINAL	6
	2R1023	CONTACT	1
		(Parts of 3S5159 Assem.)	
C 15	4S7832	GLOW PLUG	6
C 16	6L7816	SEAL	6
	5H1012	GASKET—(.125" Thick)	6
17	5H9792	GASKET—(.163" Thick)	6
C 18	8S3617	CHAMBER ASSEM.	6
	6L4407	WIRING KIT GROUP	1
		Consisting of:	
●	4S8784	WIRE—(No. 6)—120"	
●	4S8785	WIRE—(No. 10)—96"	
●	4S8787	WIRE—(No. 14)—24"	
	2L8049	TERMINAL—(No. 10 Screw)	1
	2L8051	TERMINAL—(5/16" Screw)	1
	2L8052	TERMINAL—(3/8" Screw)	1
	2L8054	TERMINAL—(1/2" Screw)	3
		(Use with No. 6 Wire)	
	2L8066	TERMINAL—(No. 10 Screw)	2
		(Use with No. 10 Wire)	
	2L8076	TERMINAL—(No. 10 Screw)	2
		(Use with No. 14 Wire)	
	2L9724	CLIP	5
	9F8292	CONNECTOR	1
	9F8294	CONNECTOR	1
	6L4408	SPLICE	1
	8L8413	TIE—(5.50" long)	4
	3S2093	TIE—(7.31" long)	1
		(Not Shown)	

126625



▲ NOT PART OF 5L6747 STARTING AID GLOW PLUG GROUP
● ORDER BY THE FOOT

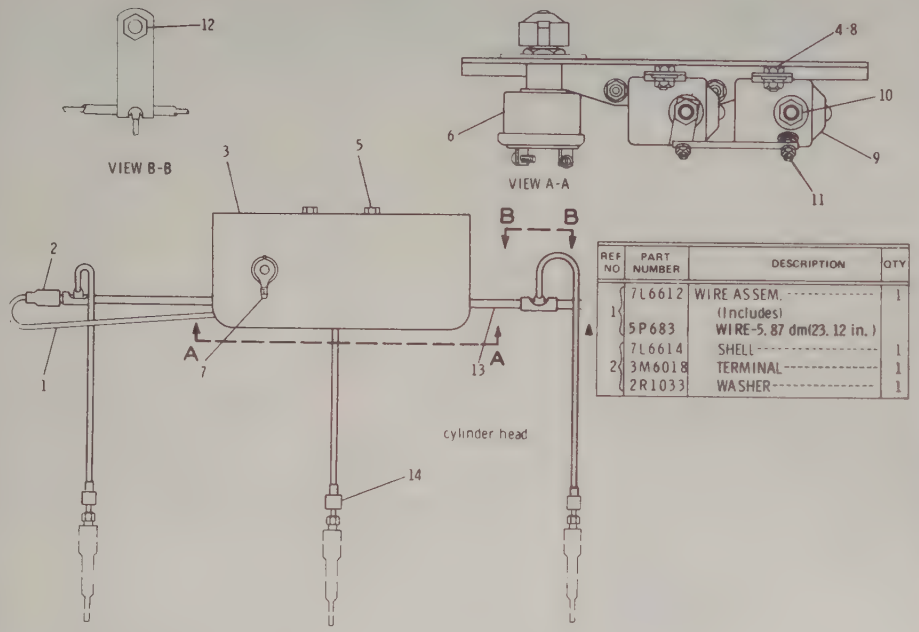
REF. NO.	PART NUMBER	DESCRIPTION	QTY.
1	9F3099	SWITCH------(Magnetic)----------	1
2	4B2043	NUT----------	2
	3B4501	LOCKWASHER----------	2
3	4F2294	NUT----------	2
	3L6789	LOCKWASHER----------	2
	8F908	WASHER----------	2
4	1B4330	NUT----------	2
	3B4504	LOCKWASHER----------	2
	4B4276	WASHER----------	2
5	8S7713	SWITCH ASSEM. --(Heat-Start)----	1
	8F3437	LEVER----------	1
	5L7200	SCREW----------	1
	3B4501	LOCKWASHER----------	1
6	S509	BOLT----------	2
	3B4506	LOCKWASHER----------	2
7	2N820	BRACKET ASSEM. ----------	1
8	S1613	BOLT----------	2
▲ 9	1M3363	PLATE------(Instruction)---------	1
	7B3028	SCREW----------	2
10	4K8977	NUT----------	3
	4B4281	WASHER----------	3
11	3S5159	LEAD ASSEM. ----------	1
	2R1023	CONTACT----------	1
12	2M5301	TERMINAL----------	6
13	1P8004	GASKET-------(.144" Thick)-------	6
	1P8005	GASKET--------(.180" Thick)------	6
14	8S3617	CHAMBER ASSEM. ----------	6

15	6L7816	SEAL----------	6
16	1P7932	GLOW PLUG----------	6
17	7L6612	WIRE ASSEM. ----------	1
18	7L6614	SHELL----------	1
	3M6018	TERMINAL----------	1
	2R1033	WASHER----------	1
▲ 19	5J9650	PLATE--------(Instruction)--------	1
▲ 20	7B3028	SCREW----------	4
	6L4407	WIRING KIT GROUP----------	1
		Consisting of:	
●	4S8784	WIRE-------(No. 6)-------120"	
●	4S8785	WIRE--------(No. 10)------96"	
●	4S8787	WIRE---------(No. 14)-----24"	
	2L8049	TERMINAL----(No. 10 Screw)----	1
	2L8051	TERMINAL-----(5/16" Screw)----	1
	2L8052	TERMINAL-----(3/8" Screw)-----	1
	2L8054	TERMINAL------(1/2" Screw)----	3
		(Use with No. 6 Wire)	
	2L8066	TERMINAL----(No. 10 Screw)----	2
		(Use with No. 10 Wire)	
	2L8076	TERMINAL----(No. 10 Screw)----	2
		(Use with No. 14 Wire)	
	2L9724	CLIP----------	5
	9F8292	CONNECTOR----------	1
	9F8294	CONNECTOR----------	1
	6L4408	SPLICE----------	1
	8L8413	TIE----------(5.50" long)-------	4
	3S2093	TIE----------(7.31" long)-------	1
		(Not Shown)	

133216

5L6747 STARTING AID GLOW PLUG GROUP—32 Volt—Type 4
Serial No. 46B1558 to 46B1855 inclusive

6N121 GLOW PLUG MOUNTING GROUP—Type 1
Serial No. 46B1856—Up
6L4407 Wiring Kit parts are shown on Page 73F

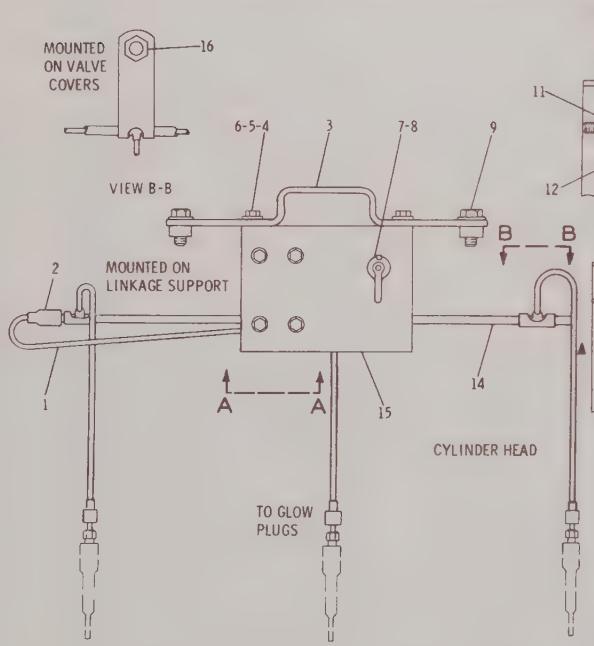


REF NO	PART NUMBER	DESCRIPTION	QTY
1	7L6612	WIRE ASSEM. (Includes)	1
	5P683	WIRE-5.87 dm(23.12 in.)	
2	7L6614	SHELL	1
	3M6018	TERMINAL	1
	2R1033	WASHER	1

3	5L6748	BRACKET ASSEM. (Includes)	1
4	S1613	BOLT	4
5	1A9136	BOLT	2
	1D4716	NUT	2
	3B4505	LOCKWASHER	2
	4B4277	WASHER	2
6	8S7713	SWITCH ASSEM. (Includes)	1
	8F3437	LEVER	1
7	5L7200	SCREW	1
	3B4501	LOCKWASHER	1
	1B4330	NUT	4
8	3B4504	LOCKWASHER	4
	4B4276	WASHER	4
9	9F3099	SWITCH-----(magnetic) (Each Includes)	1
	4F2294	NUT	2
10	3L6789	LOCKWASHER	2
	8F908	WASHER	2
11	4B2043	NUT	2
	3B4501	LOCKWASHER	2
12	4K8977	NUT	3
	4B4281	WASHER	3
13	3S5159	LEAD ASSEM. (Includes)	1
	2R1023	TERMINAL	1
14	2M5301	TERMINAL	6
●	6L4407	WIRING GROUP (Separate Illustration)	1
	GMG00698	FORM (Instructions for Installing 8S7713 Switch Assem.)	1

▲ ORDER BY THE DECIMETRE
● NOT SHOWN

151867



REF NO	PART NUMBER	DESCRIPTION	QTY
1	7L6612	WIRE ASSEM. (Includes)	1
	5P683	WIRE--5.87 dm(23.12 in.)	
2	7L6614	SHELL	1
	3M6018	TERMINAL	1
	2R1033	WASHER	1

C	3	2N4604	BRACKET	1
C	4	S1617	BOLT	2
	5	1D4716	NUT	2
C	6	9M1974	WASHER	4
	7	8S7713	SWITCH ASSEM. (Includes)	1
	8	8F3437	LEVER	1
		5L7200	SCREW	1
		3B4501	LOCKWASHER	1
C		S1585	BOLT	2
C	9	2M849	WASHER	2
C		5B546	SPACER	2
	10	9F3099	SWITCH---(magnetic) (Each Includes)	2
	11	4F2294	NUT	2
		3L6789	LOCKWASHER	2
		8F908	WASHER	2
	12	4B2043	NUT	2
		3B4501	LOCKWASHER	2
C		2A762	BOLT	4
	13	1B4330	NUT	4
C		5P537	WASHER	8
C	14	6N652	LEAD ASSEM.	1
C	15	6N3467	BRACKET	1
	16	4K8977	NUT	3
		4B4281	WASHER	3
●		6L4407	WIRING GROUP (Separate Illustration)	1
		GMG00698	FORM- (Instructions for Installing 8S7713 Switch Assem.)	1

C INDICATES CHANGE
▲ ORDER BY THE DECIMETRE
● NOT SHOWN

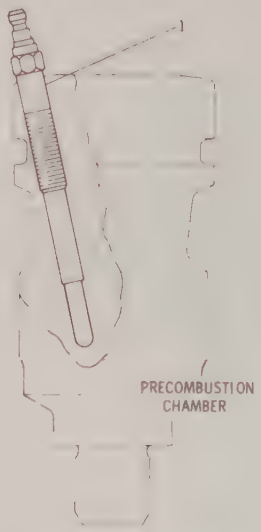
155058

6N121 GLOW PLUG MOUNTING GROUP—Type 2
Serial No. 46B1856—Up
6L4407 Wiring Kit parts are shown on Page 73F

CONSISTS OF:

	4S8787	WIRE--(No. 14 GAUGE)--10 FOOT
1	2L8049	TERMINAL (No. 10 SCREW)
1	2L8051	TERMINAL (5/16" SCREW)
1	2L8052	TERMINAL (3/8" SCREW)
3	2L8054	TERMINAL (1/2" SCREW) (USED WITH No. 6 WIRE)
4	2L8066	TERMINAL (No. 10 SCREW) (USED WITH No. 10 WIRE)
2	2L8076	TERMINAL (No. 10 SCREW) (USED WITH No. 14 WIRE)
1	9F8292	CONNECTOR (1.75" LONG)
1	9F8294	CONNECTOR (1.50" LONG)
5	2L9724	CLIP (2.50" LONG)
4	8L8413	TIE (5.50" LONG)
1	2S1043	BUTT--INSULATED
1	3S2093	TIE (7.31" LONG)
1	3N5681	TIE--CABLE (CLIP OF 50)
4	6N2569	TERMINAL
30 DM	5P2759	WIRE
24 DM	6A3353	WIRE
30 DM	6A3626	WIRE

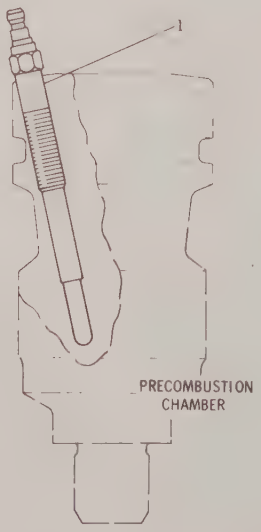
6L4407 WIRING KIT GROUP
Serial No. 46B1856—Up
Part of 6N121 Glow Plug Mounting Group shown on Pages 73D and 73E



REF NO.	PART NUMBER	DESCRIPTION	QTY
1	1P7324	GLOW PLUG	2

151858

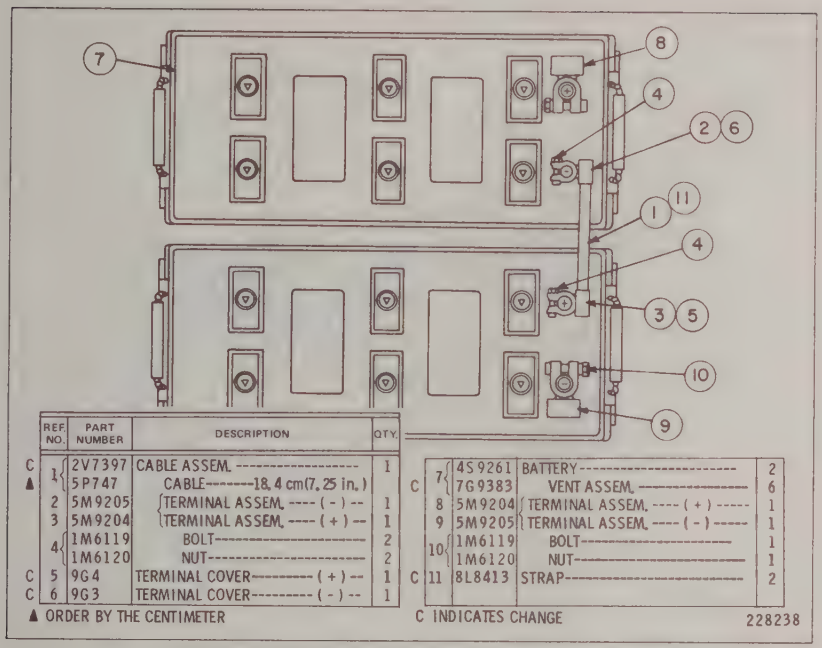
3N7679 GLOW PLUG GROUP—24 Volt—3 Required
Serial No. 46B1856—Up



REF. NO.	PART NUMBER	DESCRIPTION	QTY
1	1P7932	GLOW PLUG	2

151859

3N7680 GLOW PLUG GROUP—32 Volt—3 Required
Serial No. 46B1856—Up

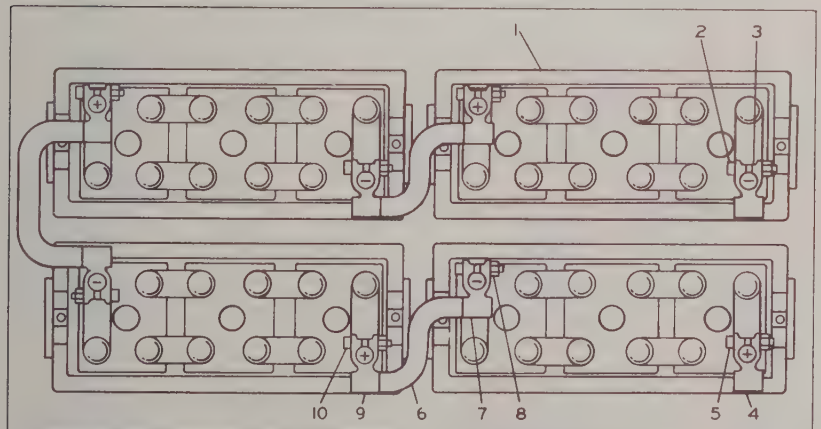


	REF. NO.	PART NUMBER	DESCRIPTION	QTY.
C ▲	1	2V7397	CABLE ASSEM.	1
		5P747	CABLE-------18.4 cm(7.25 in.)	
	2	5M9205	TERMINAL ASSEM. ---- (-) --	1
	3	5M9204	TERMINAL ASSEM. ---- (+) --	1
	4	1M6119	BOLT	2
		1M6120	NUT	2
C	5	9G4	TERMINAL COVER---------(+) --	1
C	6	9G3	TERMINAL COVER---------(-) --	1
C	7	4S9261	BATTERY	2
		7G9383	VENT ASSEM.	6
	8	5M9204	TERMINAL ASSEM. ---- (+) -----	1
	9	5M9205	TERMINAL ASSEM. ---- (-) -----	1
	10	1M6119	BOLT	1
		1M6120	NUT	1
C	11	8L8413	STRAP	2

▲ ORDER BY THE CENTIMETER

C INDICATES CHANGE 228238

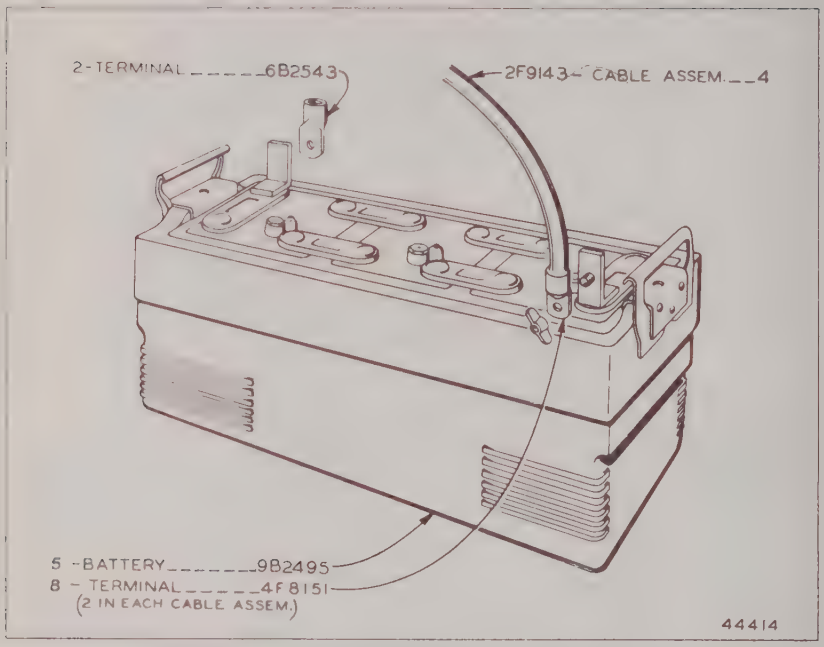
7L7871 BATTERY GROUP—24 Volt, 172 Ampere Hours



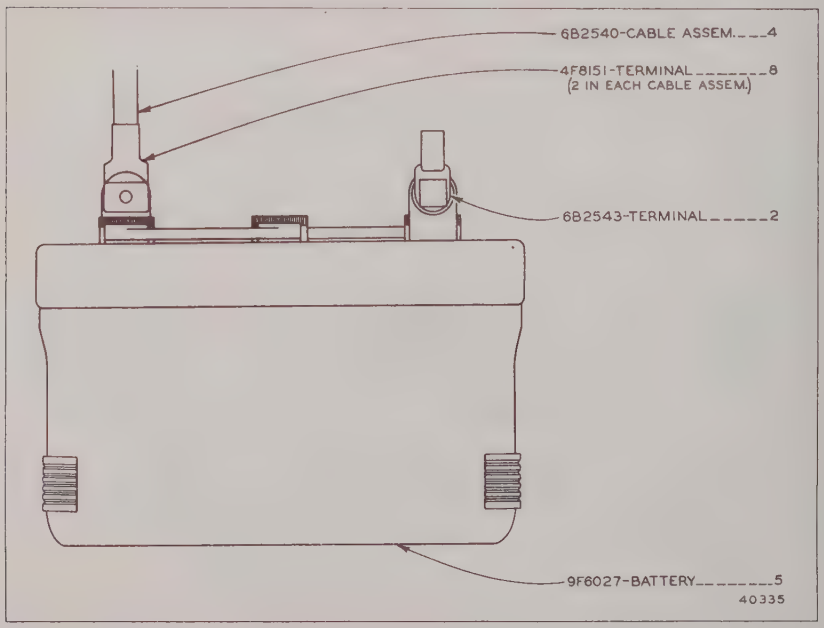
REF. NO.	PART NUMBER	DESCRIPTION	QTY
1	3N4660	BATTERY	4
2	5M9205	TERMINAL ASSEM.	1
3	1M6119	BOLT	1
	1M6120	NUT	1
4	5M9204	TERMINAL ASSEM.	1
5	1M6119	BOLT	1
	1M6120	NUT	1
6	1L5686	CABLE ASSEM.	1
7	5M9205	TERMINAL ASSEM.	1
8	1M6119	BOLT	1
	1M6120	NUT	1
9	5M9204	TERMINAL ASSEM.	1
10	1M6119	BOLT	1
	1M6120	NUT	1

142640

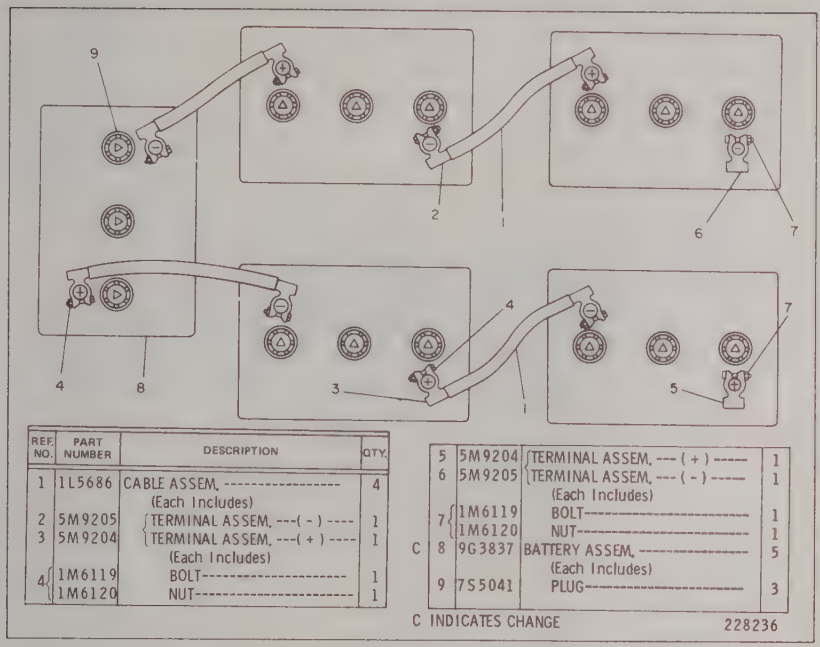
3N4653 BATTERY GROUP—24 Volt, 300 Ampere Hours



5F5276 BATTERY GROUP–32 Volt, 315 Ampere Hours
FOR USE BETWEEN 0° AND 70° FAHRENHEIT TEMPERATURE
Only separate parts serviced



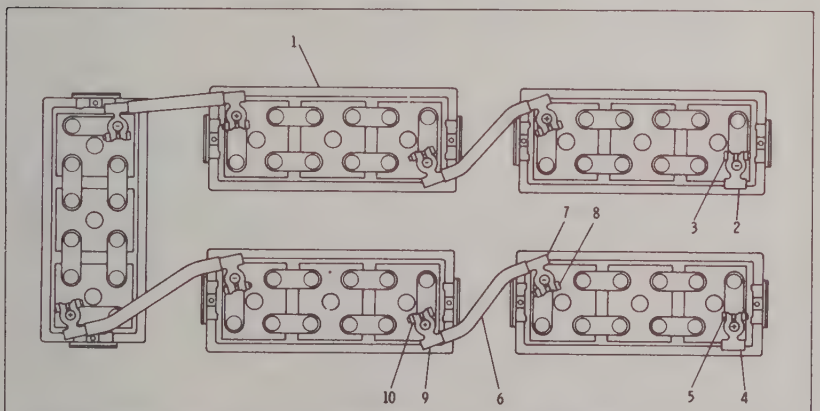
1L5663 BATTERY GROUP–32 Volt, 170 Ampere Hours
FOR USE BETWEEN 10° AND 30° FAHRENHEIT TEMPERATURE
Only separate parts serviced. When complete Group is
required order 2N1943



REF. NO.	PART NUMBER	DESCRIPTION	QTY.
1	1L5686	CABLE ASSEM. ---------- (Each Includes)	4
2	5M9205	TERMINAL ASSEM. ---(-) ----	1
3	5M9204	TERMINAL ASSEM. ---(+) ---- (Each Includes)	1
4	1M6119	BOLT----------	1
	1M6120	NUT----------	1
5	5M9204	TERMINAL ASSEM. --- (+) -----	1
6	5M9205	TERMINAL ASSEM. --- (-) ----- (Each Includes)	1
7	1M6119	BOLT----------	1
	1M6120	NUT----------	1
C 8	9G3837	BATTERY ASSEM. ---------- (Each Includes)	5
9	7S5041	PLUG----------	3

C INDICATES CHANGE 228236

2N1943 BATTERY GROUP—30 Volt, 172 Ampere Hours
FOR USE BETWEEN 10 DEGREE AND 30 DEGREE FAHRENHEIT TEMPERATURES



REF. NO.	PART NUMBER	DESCRIPTION	QTY.
1	3N4660	BATTERY----------	5
2	5M9205	TERMINAL ASSEM. ----------	1
3	1M6119	BOLT----------	1
	1M6120	NUT----------	1
4	5M9204	TERMINAL ASSEM. ----------	1
5	1M6119	BOLT----------	1
	1M6120	NUT----------	1
6	1L5686	CABLE ASSEM. ----------	4
7	5M9205	TERMINAL ASSEM. ----------	1
8	1M6119	BOLT----------	1
	1M6120	NUT----------	1
9	5M9204	TERMINAL ASSEM. ----------	1
10	1M6119	BOLT----------	1
	1M6120	NUT----------	1

144227

3N4654 BATTERY GROUP—30 Volt, 300 Ampere Hours

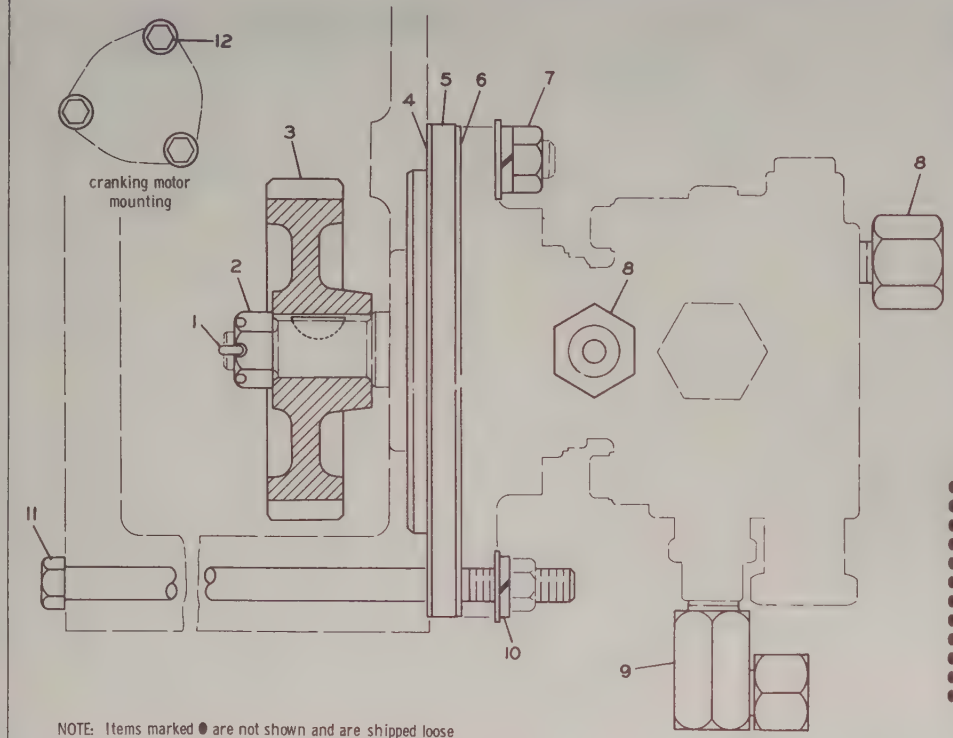
		Consists of:	Page
1	5L1621	Fuel Priming Pump	68A
	- or -		
1	8L4943	Fuel Priming Pump	68B
1	6L4034	Hardware Group	74C
1	2L3333	Gauge	
1	2L3337	Filter	
	- or -		
2	2N3341	Filter	
1	2L8342	Hand Pump	
2	2L8343	Accumulator	
1	6L2666	Starter Control Valve	
1	6L2794	Diagram	
2	6L2852	Strap--Reservoir Mounting	
1	6L2853	Reservoir Assembly	
1	6L8721	Recharging Pump Assembly	
1	7L8656	Cranking Motor	
4	3L4238	Accumulator Bracket Assembly	
		Each consisting of:	
		2 4B4277 Washer	
		2 5B5620 Bolt	
		2 2L5683 Clamp--Accumulator	
		1 2L5684 Support--Accumulator Clamp	
		2 4M5280 Nut	
2	3N9503	Accumulator Assembly--Piston Type	
		Each consisting of:	
		1 1S8411 Tag	
		1 3N9502 Plate--Warning	

6L4040 HYDRAULIC STARTING SYSTEM—Type 1

		Consists of:	Page
1	6L4034	Hardware Group	74C
1	2L3333	Gauge	
2	2N3341	Filter	
1	2L8342	Hand Pump	
2	2L8343	Accumulator	
1	6L2666	Starter Control Valve	
1	6L2794	Diagram	
2	6L2852	Strap--Reservoir Mounting	
1	6L2853	Reservoir Assembly	
1	6L8721	Recharging Pump Assembly	
1	7L8656	Cranking Motor	
4	3L4238	Accumulator Bracket Assembly	
		Each consisting of:	
		2 4B4277 Washer	
		2 5B5620 Bolt	
		2 2L5683 Clamp--Accumulator	
		1 2L5684 Support--Accumulator Clamp	
		2 4M5280 Nut	
2	3N9503	Accumulator Assembly--Piston Type	
		Each consisting of:	
		1 1S8411 Tag	
		1 3N9502 Plate--Warning	

6L4040 HYDRAULIC STARTING SYSTEM—Type 2

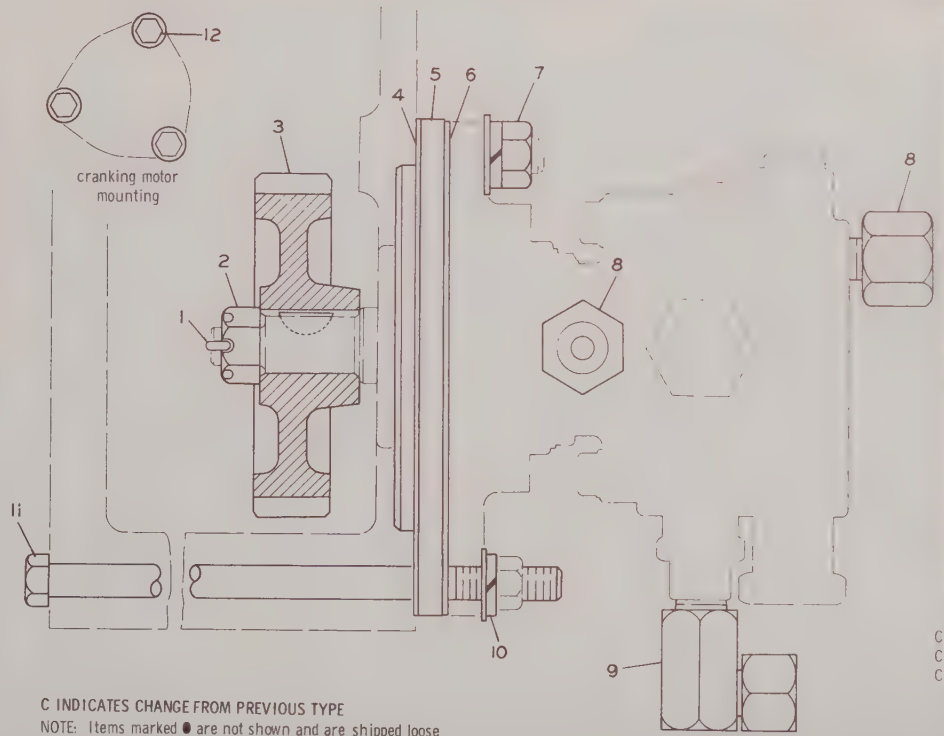
6L4034 HARDWARE GROUP–Type 1
Part of Hydraulic Starting System



REF. NO.	PART NUMBER	DESCRIPTION	QTY
1	3B4621	COTTER PIN	1
2	1S1421	NUT	1
	2L6767	GEAR (32 Teeth)	1
		-OR-	
3	4F9688	GEAR (32 Teeth) (Used with Auxiliary Drive Group)	1
	1B8707	KEY	1
4	3L7229	GASKET	1
5	3L6801	ADAPTER	1
6	6F8613	GASKET	1
	S1587	BOLT	1
7	3B4508	LOCKWASHER	2
	4B4280	WASHER	2
8	4L7412	ADAPTER	2
9	2H3940	UNION	1
10	3B4507	LOCKWASHER	1
	4B4279	WASHER	1
11	2L7442	BOLT	1
	1F1362	BOLT	3
12	3B4510	LOCKWASHER	3
	6B863	WASHER	3
●	8B2664	BUSHING	2
●	3D8884	ELBOW	1
●	5L5502	SERVICE TEE	2
●	5B8978	SERVICE TEE	2
●	7L157	HOSE	1
●	7L158	HOSE	1
●	2D8910	UNION	1
●	2D58	UNION	5
●	2H3940	UNION	2
●	4H2243	COUPLING	12
●	4D3763	COUPLING	8
●	4D4917	TEE	1

NOTE: Items marked ● are not shown and are shipped loose

128363



	REF NO	PART NUMBER	DESCRIPTION	QTY
	1	3B4621	COTTER PIN	1
	2	1S1421	NUT	1
	3	2L6767	GEAR (32 Teeth)	1
		1B8707	KEY	1
	4	3L7229	GASKET	1
	5	3L6801	ADAPTER	1
	6	6F8613	GASKET	1
	7	1S1587	BOLT	1
		3B4508	LOCKWASHER	2
		4B4280	WASHER	2
	8	4L7412	ADAPTER	2
	9	2D8910	UNION	1
	10	3B4507	LOCKWASHER	1
		4B4279	WASHER	1
	11	2L7442	BOLT	1
	12	1F1362	BOLT	3
		3B4510	LOCKWASHER	3
		6B863	WASHER	3
	●	8B2664	BUSHING	2
	●	3D8884	ELBOW	1
	●	5L5502	SERVICE TEE	2
	●	5B8978	SERVICE TEE	2
	●	7L157	HOSE	1
	●	7L158	HOSE	1
	●	2D8910	UNION	1
	●	2D58	UNION	3
	●	2H3940	UNION	2
	●	4H2243	COUPLING	12
	●	4D3763	COUPLING	8
	●	4D4917	TEE	1
C	●	3B7284	NIPPLE	2
C	●	7B9684	VALVE	1
C	●	2H9091	UNION	3

C INDICATES CHANGE FROM PREVIOUS TYPE

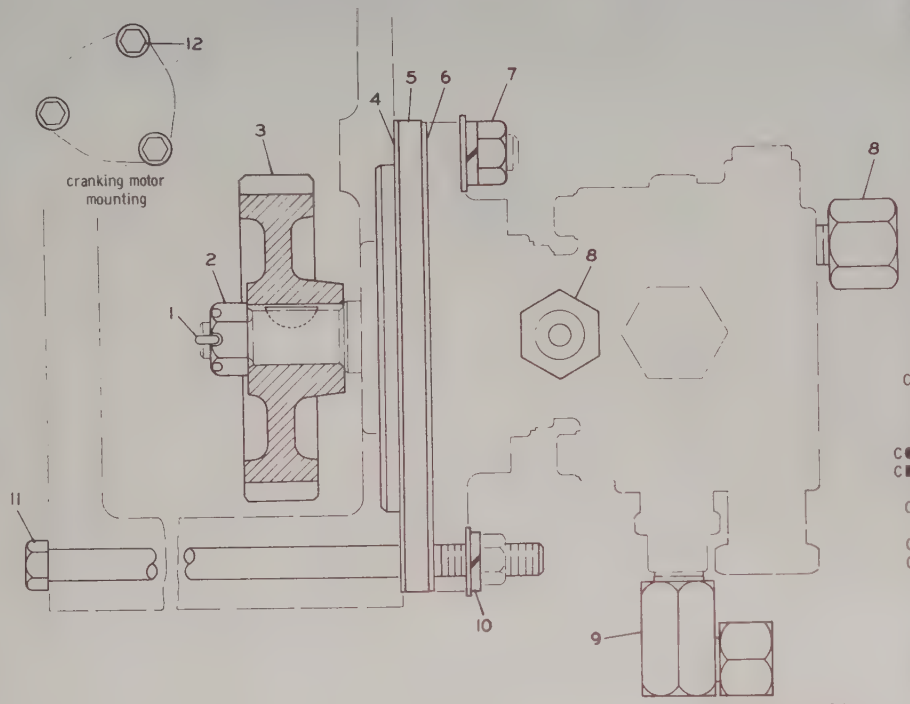
NOTE: Items marked ● are not shown and are shipped loose

128364

6L4034 HARDWARE GROUP—Type 2

Part of Hydraulic Starting System listed on Page 74B

6L4034 HARDWARE GROUP—Type 3
Part of Hydraulic Starting System listed on Page 74B



REF. NO	PART NUMBER	DESCRIPTION	QTY
1	3B4621	COTTER PIN	1
2	1S1421	NUT	1
3	2L6767	GEAR---(32 Teeth)	1
	1B8707	KEY	1
4	3L7229	GASKET	1
5	3L6801	ADAPTER	1
6	6F8613	GASKET	1
7	1S1587	BOLT	1
	3B4508	LOCKWASHER	2
	4B4280	WASHER	2
8	4L7412	ADAPTER	2
9	2D8910	UNION	1
10	3B4507	LOCKWASHER	1
	4B4279	WASHER	1
11	2L7442	BOLT	1
	1F1362	BOLT	3
12	3B4510	LOCKWASHER	3
	6B863	WASHER	3
C	8B2664	BUSHING	4
	3D8884	ELBOW	1
	5L5502	SERVICE TEE	2
	5B8978	SERVICE TEE	2
C●	5P1400	HOSE---305 cm(120.08 in.)	
C■	9S671	HOSE---(use as required)---480 in.	
	2D8910	UNION	1
C	2D58	UNION	1
▲	2H3940	UNION	2
C	4H2243	COUPLING	1■
C	3N6922	COUPLING	2
	4D4917	TEE	1
	3B7284	NIPPLE	2
	7B9684	VALVE	1
	2H9091	UNION	3
	70950	ADAPTER	1
	7D702	UNION	1

■ ORDER BY THE INCH
● ORDER BY THE CENTIMETRE
▲ NOT SHOWN-SHIP LOOSE
C INDICATES CHANGE

146704

5L5431 Air Starting Arrangement--R.H.

Consists of:

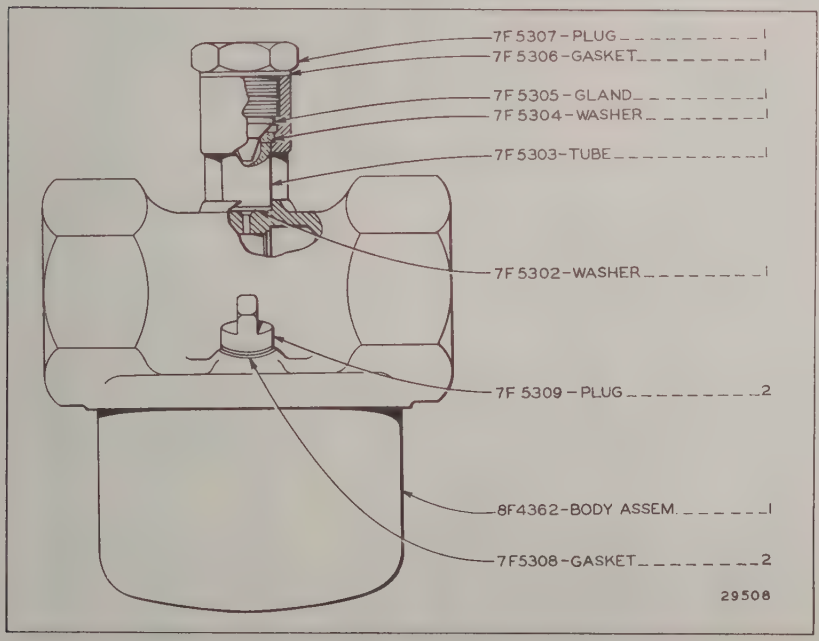
			Page
1	5L1621	Fuel Priming Pump Group	68A
	- or -		
1	8L4943	Fuel Priming Pump Group	68B
1	5L5427	Air Starting Motor Group	76

5L5432 Air Starting Arrangement--L.H.

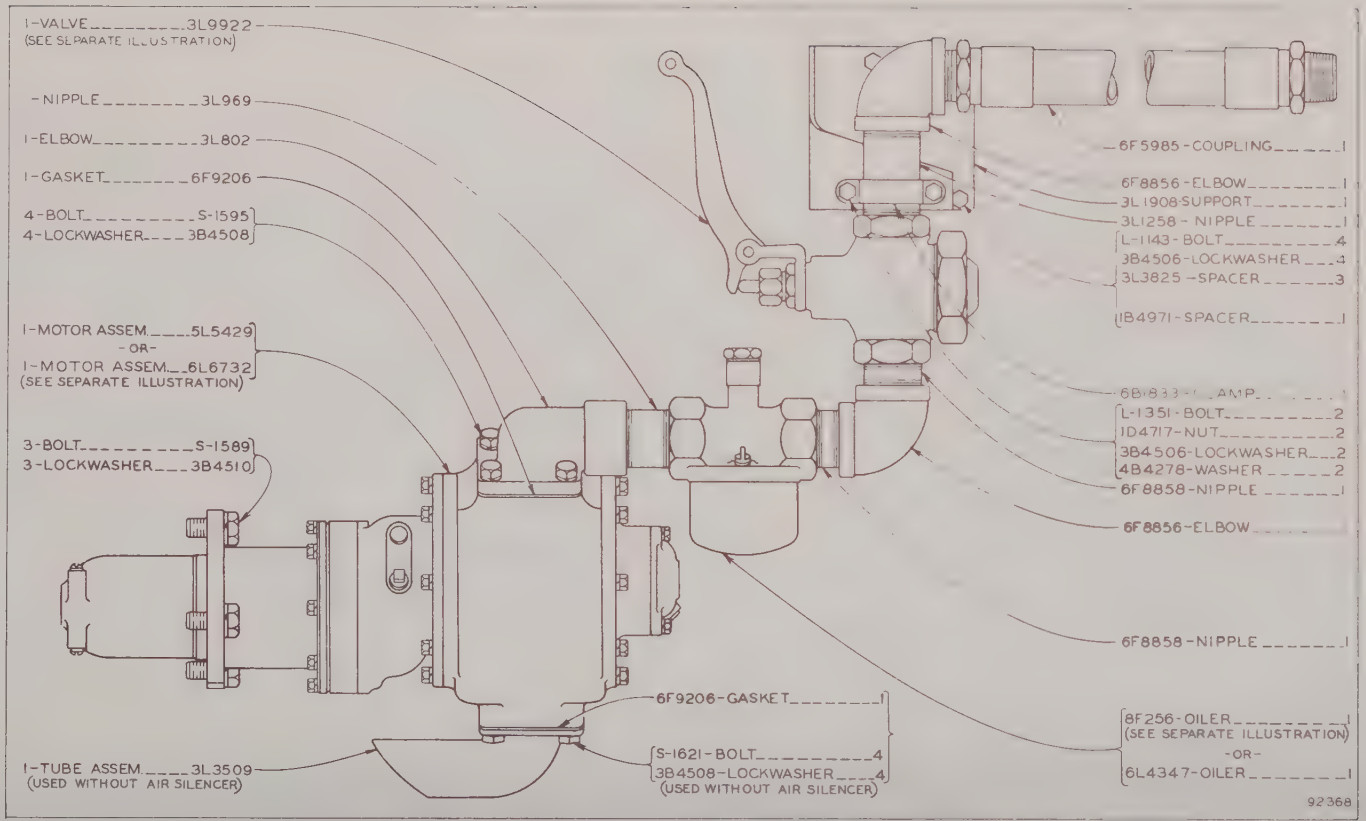
Consists of:

1	5L1621	Fuel Priming Pump Group	68A
	- or -		
1	8L4943	Fuel Priming Pump Group	68B
1	5L5428	Air Starting Motor Group	77

AIR STARTING ARRANGEMENT

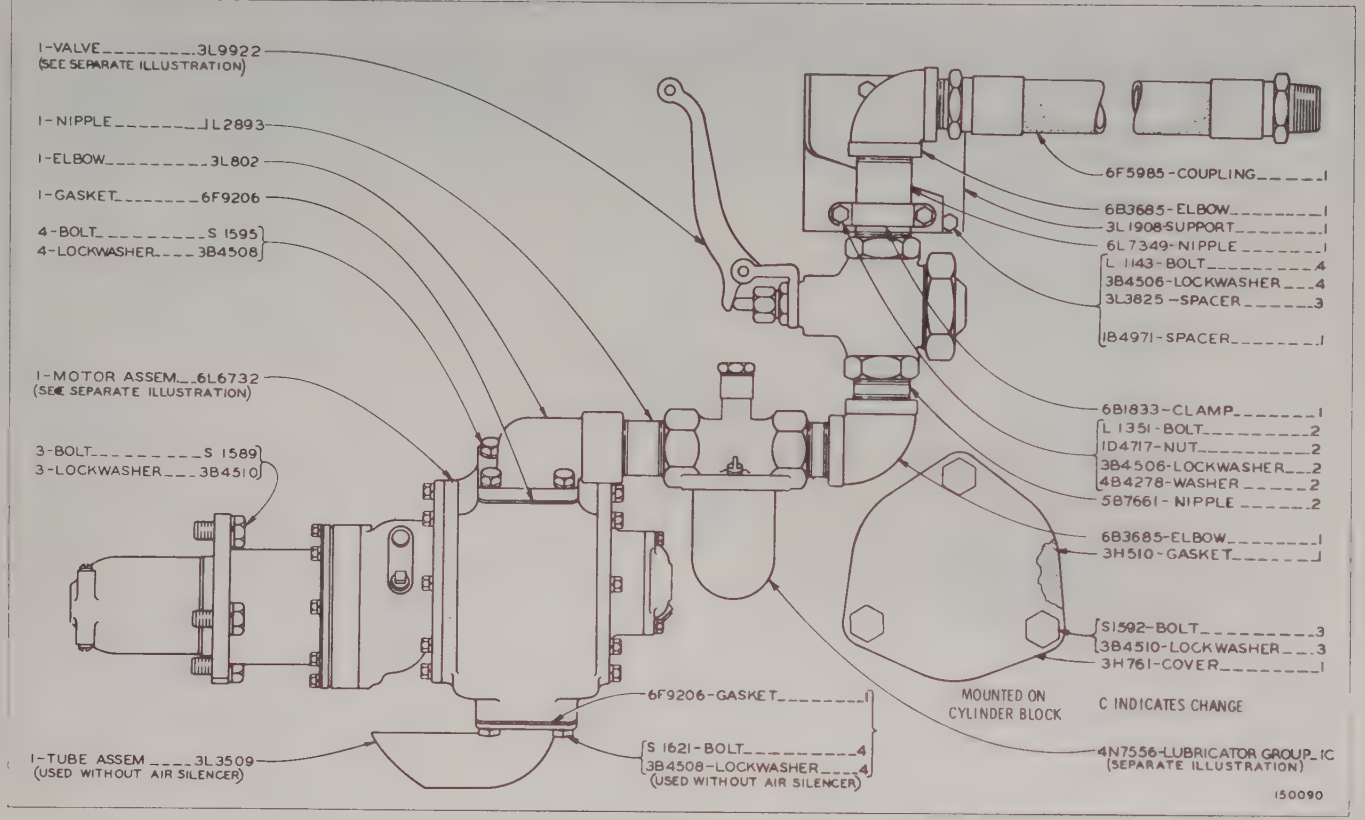


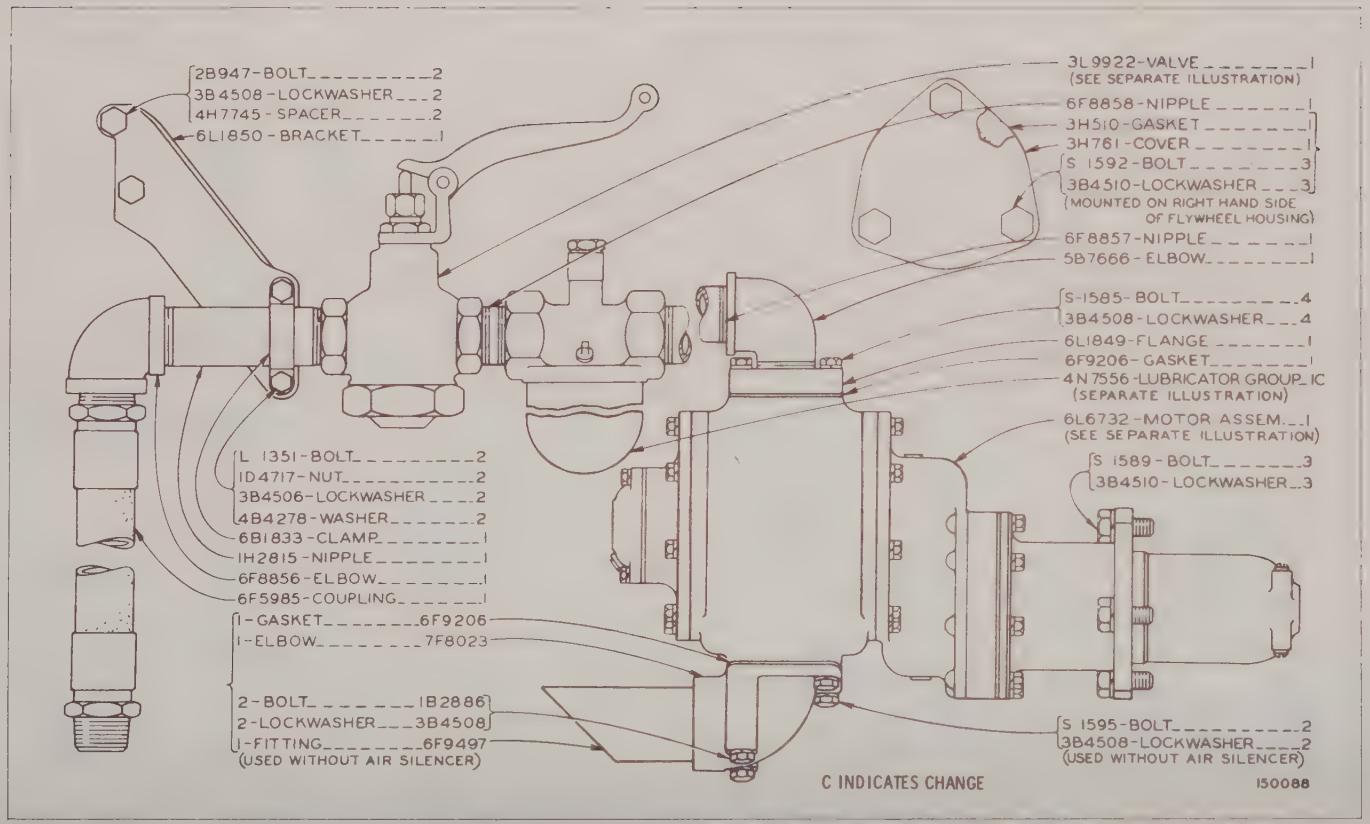
8F256 OILER
Part of 5L5427 Air Starting Motor Group shown on Page 76



5L5427 AIR STARTING MOTOR GROUP—R.H.—Type 1—Replaced by 6N6108 shown on Page 76D
Part of 5L5431 Air Starting Arrangement listed on Page 75
8F256 Oiler, 5L5429 and 6L6732 Air Starting Motor Assembly and 3L9922 Whistle Valve parts are shown on Pages 75, 78, 78A and 80

5L5427 AIR STARTING MOTOR GROUP—R.H.—Type 2—Replaced by 6N6108 shown on Page 76D
Part of 5L5431 Air Starting Arrangement listed on Page 75. 6L6732 Motor, 3L9922 Whistle Valve and 4N7556 Air Motor Lubricator parts are shown on Pages 78, 78A, 80 and 80A

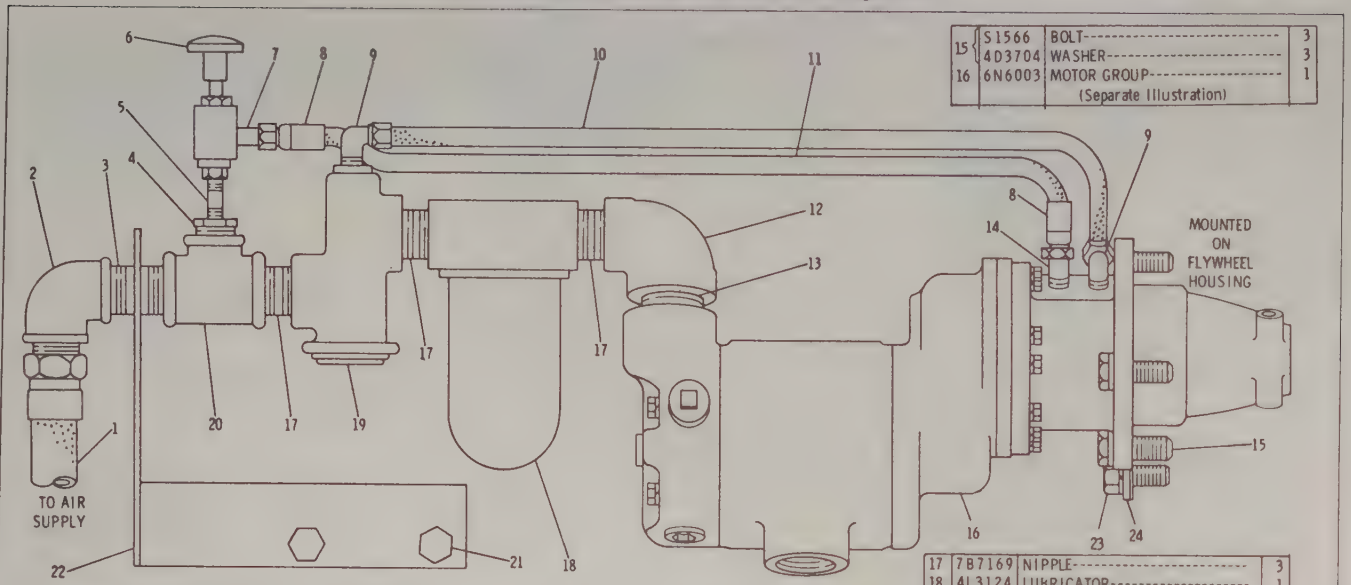




5L5428 AIR STARTING MOTOR GROUP—L.H.—Replaced by 6N5992 shown on Page 76C
Also part of 5L5432 Air Starting Arrangement listed on Page 75. 6L6732 Motor, 3L9922 Whistle Valve and 4N7556 Air Motor Lubricator parts are shown on Pages 78, 78A, 80 and 80A

6N5992 AIR STARTING MOTOR GROUP—L.H.

6N6003 Air Starting Motor parts are shown on Page 76E

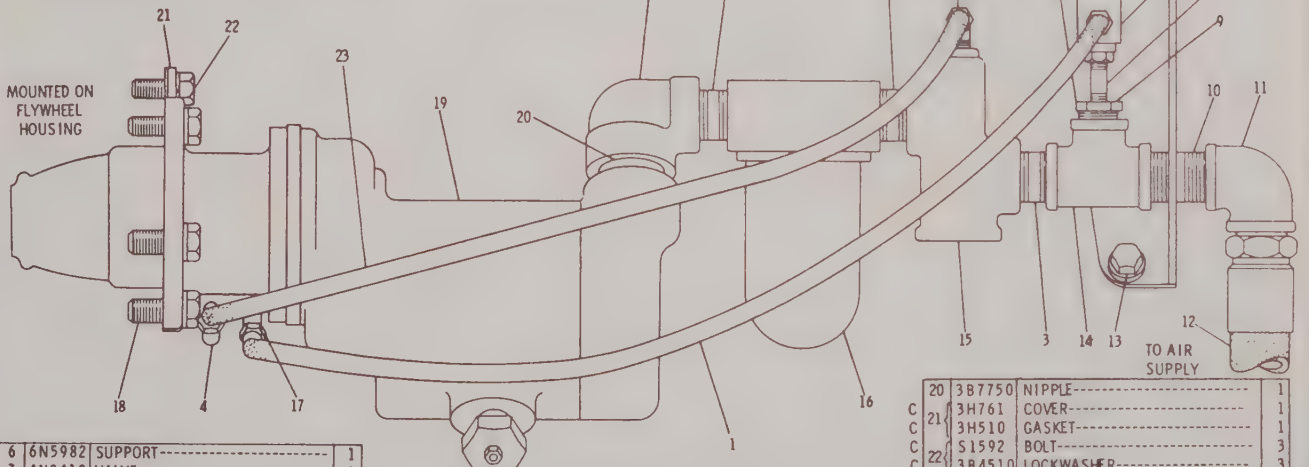


REF. NO.	PART NUMBER	DESCRIPTION	QTY.
1	9L4652	HOSE ASSEM.	1
2	3B6498	ELBOW	1
3	6B8128	NIPPLE	1
4	7B2176	BUSHING--------(reducing)------	1
5	3B7733	NIPPLE	1
6	4N3410	VALVE-------(starter control)------	1
7	2N1287	ELBOW	1
8	16285	COUPLING	2
9	6K1972	FITTING	2
▲ 10	317206	HOSE ASSEM.	1
	5P733	HOSE--55.24cm(21.7 in.)	
	16285	END	2
▲ 11	5P730	HOSE--------65.4cm(25.75 in.)	
12	1H7742	ELBOW	1
13	3B7750	NIPPLE	1
14	5J7303	FITTING	1
15	S1566	BOLT	3
	4D3704	WASHER	3
16	6N6003	MOTOR GROUP (Separate Illustration)	1
17	7B7169	NIPPLE	3
18	4L3124	LUBRICATOR	1
19	7M9544	VALVE ------(air starter)--------	1
20	2N3599	TEE	1
21	S1595	BOLT	2
	2M849	WASHER	2
22	6N5983	SUPPORT	1
C 23	3H761	COVER	1
C	3H510	GASKET	1
C 24	S1592	BOLT	3
C	3B4510	LOCKWASHER	3

C INDICATES CHANGE

▲ ORDER BY THE CENTIMETER

179327



REF. NO.	PART NUMBER	DESCRIPTION	QTY
C▲ 1	5P733	HOSE----------65.4cm(27.8 In.)	
	16285	END----------	4
2	1H7742	ELBOW----------	1
3	7B7169	NIPPLE----------	3
4	6K1972	ELBOW----------	2
5	2N1287	ELBOW----------	1

13	1A2029	BOLT----------	2
14	5M2894	WASHER----------	2
	2N3599	TEE----------	1
15	7M9544	VALVE----------	1

6	6N5982	SUPPORT----------	1
7	4N3410	VALVE----------	1
8	3B7733	NIPPLE----------	1
9	7B2176	BUSHING----------	1
10	6B8128	NIPPLE----------	1
11	3B6498	ELBOW----------	1
12	9L4652	HOSE ASSEM. ---43.81 cm(17.25 In)	1

16	4L3124	LUBRICATOR----------	1
17	5J7303	ELBOW----------	1
18	S1566	BOLT----------	3
	4D3704	WASHER----------	3
● 19	6N6002	MOTOR GROUP----------	1

C 20	3B7750	NIPPLE----------	1
C 21	3H761	COVER----------	1
C	3H510	GASKET----------	1
C 22	S1592	BOLT----------	3
C	3B4510	LOCKWASHER----------	3
C	317206	HOSE ASSEM. ----------	1
		(Includes)	
▲ 23	5P733	HOSE---55.2cm(21.8 In.)	
	16285	END----------	2

C INDICATES CHANGE ● SEPARATE ILLUSTRATION

▲ ORDER BY THE CENTIMETER 179328

6N6108 AIR STARTING MOTOR GROUP—R.H.

6N6002 Air Starting Motor parts are shown on Page 76F

6N6003 AIR STARTING MOTOR GROUP—L.H.

Part of 6N5992 Air Starting Motor Group shown on Page 76C

REF NO	PART NUMBER	DESCRIPTION	QTY
1	4N4371	COVER ASSEM.	1
	4N4372	SCREW	2
	4N4373	FELT	2
2	2B7457	PLUG	1
3	7M7410	PLUG	3
4	4N4375	BEARING	1
5	4N4377	PLATE	1
	4N4376	GASKET	1
6	4N4378	CYLINDER	1
7	4N4379	DOWEL	1
8	4N4387	CASE ASSEM.	1
	4N4388	WASHER	1
9	4N4390	WASHER	1
10	4N4394	GEAR	1
11	4N4392	COVER ASSEM.	1
12	4N4393	SEAL	1
13	6H3977	SEAL	1
14	8F8882	SEAL	1
15	4N4398	PISTON ASSEM.	1
16	4N4399	RING	1
17	4N4403	SPRING	1
18	4N4405	CLUTCH ASSEM.	1
19	4N4406	HOUSING ASSEM.	1
20	2B4602	PLUG	1
	4N4408	OILER	1
21	4N4407	BUSHING	1
22	4N4421	SHAFT	1
	4N4391	KEY	1
23	4N4404	SEAT	1
	4N4400	RING	1
24	4N4402	SPACER	1
	520512	RETAINER	1
25	2A5546	BOLT	11
	3B4504	LOCKWASHER	11
26	4N4397	COLLAR	1
27	5F8651	BEARING	1
28	4N4413	PINION	1
	4N4386	RETAINER	1
29	9B9774	BEARING	1
30	4N4382	PLATE	1
	4N4384	GASKET	1
31	4N4383	HOUSING	1
32	4N4381	ROTOR	1
33	8F8544	BOLT	4
	3B4506	LOCKWASHER	4
34	5L4035	RETAINER	1

THE FOLLOWING REPAIR KIT IS AVAILABLE:

4N4380 KIT—(vane) 1

157685

6N6003 AIR STARTING MOTOR GROUP—L.H.—Type 2

Part of 6N5992 Air Starting Motor Group shown on Page 76C

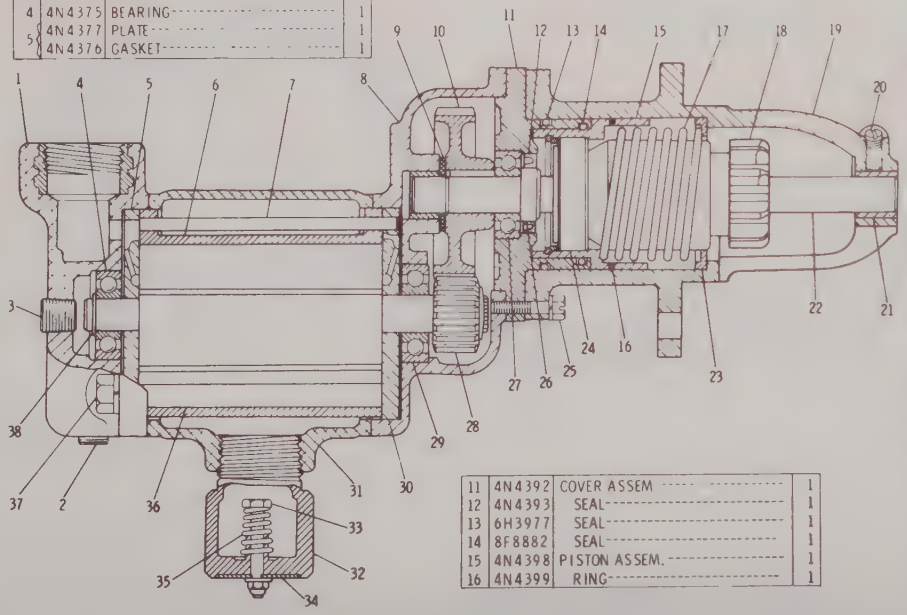
REF. NO.	PART NUMBER	DESCRIPTION	QTY
1	4N4371	COVER ASSEM. (Includes)	1
2	7M7410	PLUG	3
3	4N4375	BEARING	1
4	4N4377	PLATE	1
5	4N4376	GASKET	1
6	4N4378	CYLINDER	1
7	4N4379	DOWEL	1
8	4N4387	CASE ASSEM.	1
	4N4388	WASHER	1
9	4N4390	WASHER	1
10	4N4394	GEAR	1
11	4N4392	COVER ASSEM	1
12	4N4393	SEAL	1
13	6H3977	SEAL	1
14	8F8882	SEAL	1
15	4N4398	PISTON ASSEM.	1
16	4N4399	RING	1
17	4N4403	SPRING	1
18	4N4405	CLUTCH ASSEM.	1
19	4N4406	HOUSING ASSEM.	1
20	2B4602	PLUG	1
	4N4408	OILER	1
21	4N4407	BUSHING	1
22	4N4421	SHAFT	1
	4N4391	KEY	1
23	4N4404	SEAT	1
	4N4400	RING	1
24	4N4402	SPACER	1
	520512	RETAINER	1
25	2A5546	BOLT	11
	3B4504	LOCKWASHER	11
26	4N4397	COLLAR	1
27	5F8651	BEARING	1
28	4N4413	PINION	1
	4N4386	RETAINER	1
29	9B9774	BEARING	1
30	4N4382	PLATE	1
	4N4384	GASKET	1
31	4N4383	HOUSING	1
32	4N4381	ROTOR	1
33	8F8544	BOLT	4
	3B4506	LOCKWASHER	4
34	5L4035	RETAINER	1

THE FOLLOWING REPAIR KIT IS AVAILABLE:

4N4380 KIT-------(vane)---------- 1

219981

REF NO	PART NUMBER	DESCRIPTION	QTY
1	4N4371	COVER ASSEM.	1
	4N4372	SCREW	2
	4N4373	FELT	2
2	2B7457	PLUG	1
3	7M7410	PLUG	3
4	4N4375	BEARING	1
5	4N4377	PLATE	1
	4N4376	GASKET	1
6	4N4378	CYLINDER	1
7	4N4379	DOWEL	1
8	4N4387	CASE ASSEM.	1
	4N4388	WASHER	1
9	4N4390	WASHER	1
10	4N4394	GEAR	1
11	4N4392	COVER ASSEM.	1
12	4N4393	SEAL	1
13	6H3977	SEAL	1
14	8F8882	SEAL	1
15	4N4398	PISTON ASSEM.	1
16	4N4399	RING	1
17	4N4403	SPRING	1
18	4N4405	CLUTCH ASSEM.	1
19	4N4406	HOUSING ASSEM.	1
20	2B4602	PLUG	1
	4N4408	OILER	1
21	4N4407	BUSHING	1
22	4N4421	SHAFT	1
	4N4391	KEY	1
23	4N4404	SEAT	1
	4N4400	RING	1
24	4N4402	SPACER	1
	520512	RETAINER	1
25	2A5546	BOLT	11
	3B4504	LOCKWASHER	11
26	4N4397	COLLAR	1
27	5F8651	BEARING	1
28	4N4413	PINION	1
	4N4386	RETAINER	1
29	9B9774	BEARING	1
30	4N4382	PLATE	1
	4N4384	GASKET	1
31	4N4383	HOUSING	1
32	4N4409	DEFLECTOR ASSEM.	1
33	4N4411	STEM	1
	4L1250	NUT	1
	4B4274	WASHER	1
34	4N4410	PLATE	1
35	4N4414	SPRING	1
36	4N4381	ROTOR	1
37	8F8544	BOLT	4
	3B4506	LOCKWASHER	4
38	5L4035	RETAINER	1
		THE FOLLOWING REPAIR KIT IS AVAILABLE:	
	4N4380	KIT (Vane)	1



157687

6N6002 AIR STARTING MOTOR GROUP—R.H.
Part of 6N6108 Air Starting Motor Group shown on Page 76D

6N6002 AIR STARTING MOTOR GROUP—R.H.—Type 2

Part of 6N6108 Air Starting Motor Group shown on Page 76D

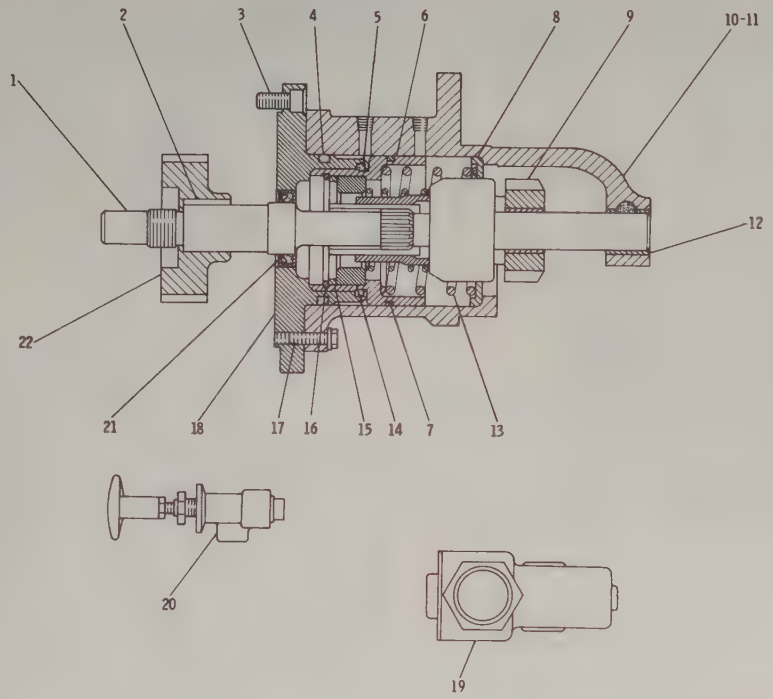
REF. NO	PART NUMBER	DESCRIPTION	QTY
1	4N4371	COVER ASSEM. (Includes)	1
2	7M7410	PLUG	3
3	4N4375	BEARING	1
4	4N4377	PLATE	1
5	4N4376	GASKET	1
6	4N4378	CYLINDER	1
7	4N4379	DOWEL	1
8	4N4387	CASE ASSEM.	1
	4N4388	WASHER	1
9	4N4390	WASHER	1
10	4N4394	GEAR	1
11	4N4392	COVER ASSEM.	1
12	4N4393	SEAL	1
13	6H3977	SEAL	1
14	8F8882	SEAL	1
15	4N4398	PISTON ASSEM.	1
16	4N4399	RING	1
17	4N4403	SPRING	1
18	4N4405	CLUTCH ASSEM.	1
19	4N4406	HOUSING ASSEM	1
20	2B4602	PLUG	1
	4N4408	OILER	1
21	4N4407	BUSHING	1
22	4N4421	SHAFT	1
	4N4391	KEY	1
23	4N4404	SEAT	1
	4N4400	RING	1
24	4N4402	SPACER	1
	520512	RETAINER	1
25	2A5546	BOLT	11
	3B4504	LOCKWASHER	11
26	4N4397	COLLAR	1
27	5F8651	BEARING	1
28	4N4413	PINION	1
	4N4386	RETAINER	1
29	9B9774	BEARING	1
30	4N4382	PLATE	1
	4N4384	GASKET	1
31	4N4383	HOUSING	1
32	4N4409	DEFLECTOR ASSEM.	1
33	4N4381	ROTOR	1
34	8F8544	BOLT	4
	3B4506	LOCKWASHER	4
35	5L4035	RETAINER	1

THE FOLLOWING REPAIR KIT IS AVAILABLE:

4N4380	KIT—(vane)	1

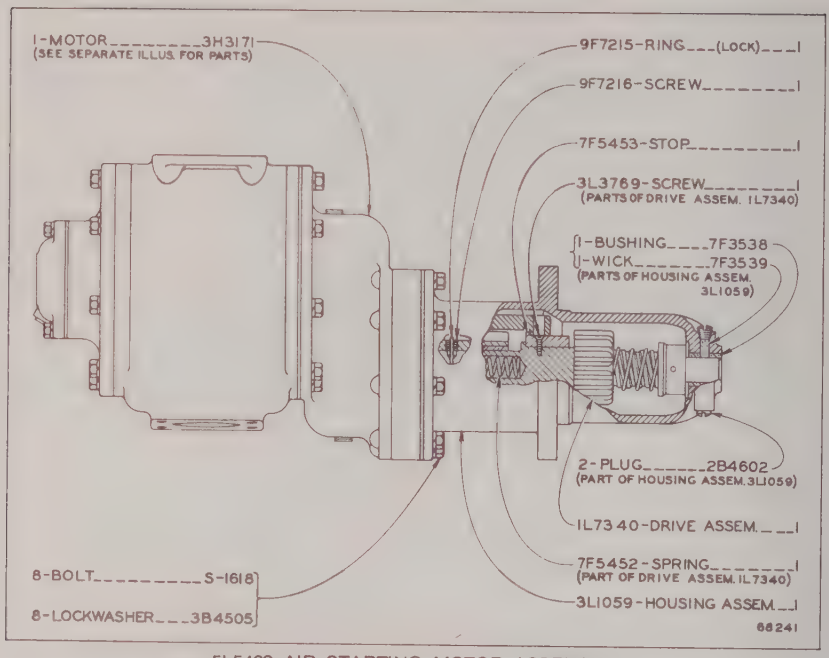
220801

4N4985 AIR START CHANGEOVER GROUP—S.A.E. Standard Engine Rotation
Field Installation
For use with 6L6732 Air Starting Motor Assembly shown on Pages 78 & 78A



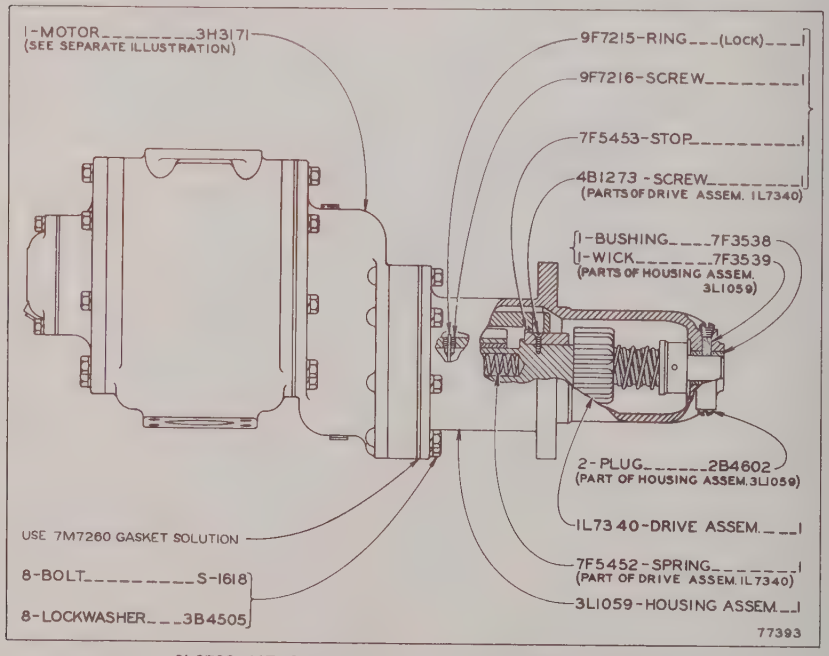
REF. NO	PART NUMBER	DESCRIPTION	QTY
1	4N9566	SHAFT	1
2	4N9567	KEY	1
3	9F5975	BOLT	8
4	6H3977	SEAL	1
5	8F8882	SEAL	1
6	4N4398	PISTON ASSEM. (Includes)	1
7	4N4399	RING	1
8	4N4404	SEAT	1
9	4N4405	CLUTCH ASSEM.	1
10	4N4406	HOUSING ASSEM. (Includes)	1
11	2B4602	PLUG	1
	4N4408	OILER	1
12	4N4407	BUSHING	1
13	4N4403	SPRING	1
14	4N4400	RING	1
15	4N4402	SPACER	1
16	520512	RETAINER	1
17	S1616	BOLT	12
	3B4504	LOCKWASHER	12
18	4N9565	COVER	1
19	4N3411	VALVE	1
20	4N3410	VALVE	1
21	4N4393	SEAL	1
22	4N9568	GEAR (drive-30 teeth)	1

149286



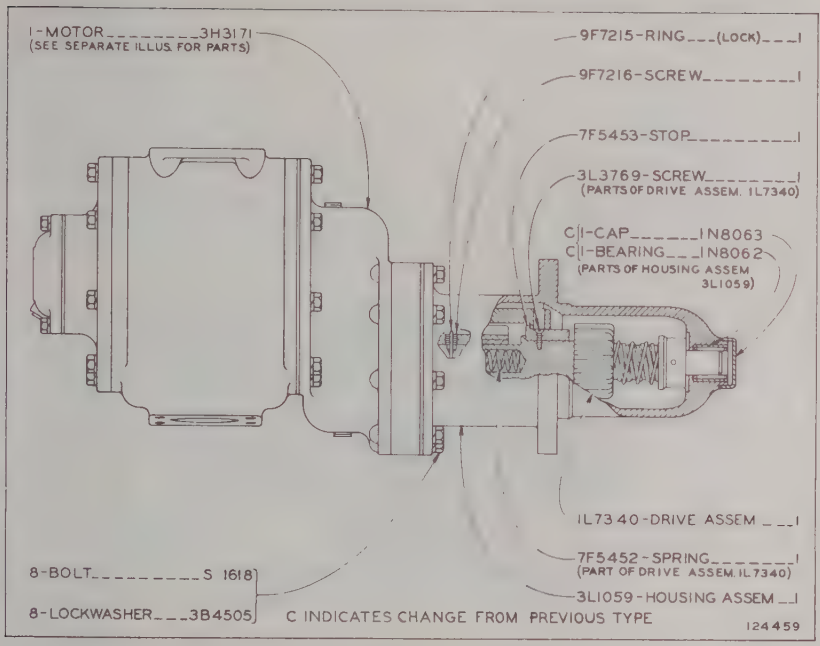
5L5429 AIR STARTING MOTOR ASSEMBLY

Part of 5L5427 Air Starting Motor Group shown on Page 76. Only separate parts serviced. When complete Assembly is required order 6L6732

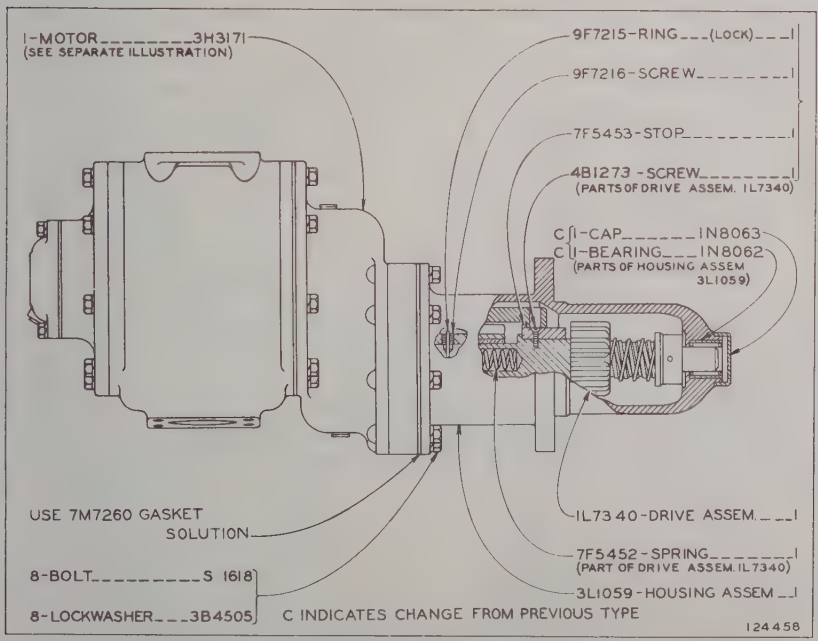


6L6732 AIR STARTING MOTOR ASSEMBLY—Type 1

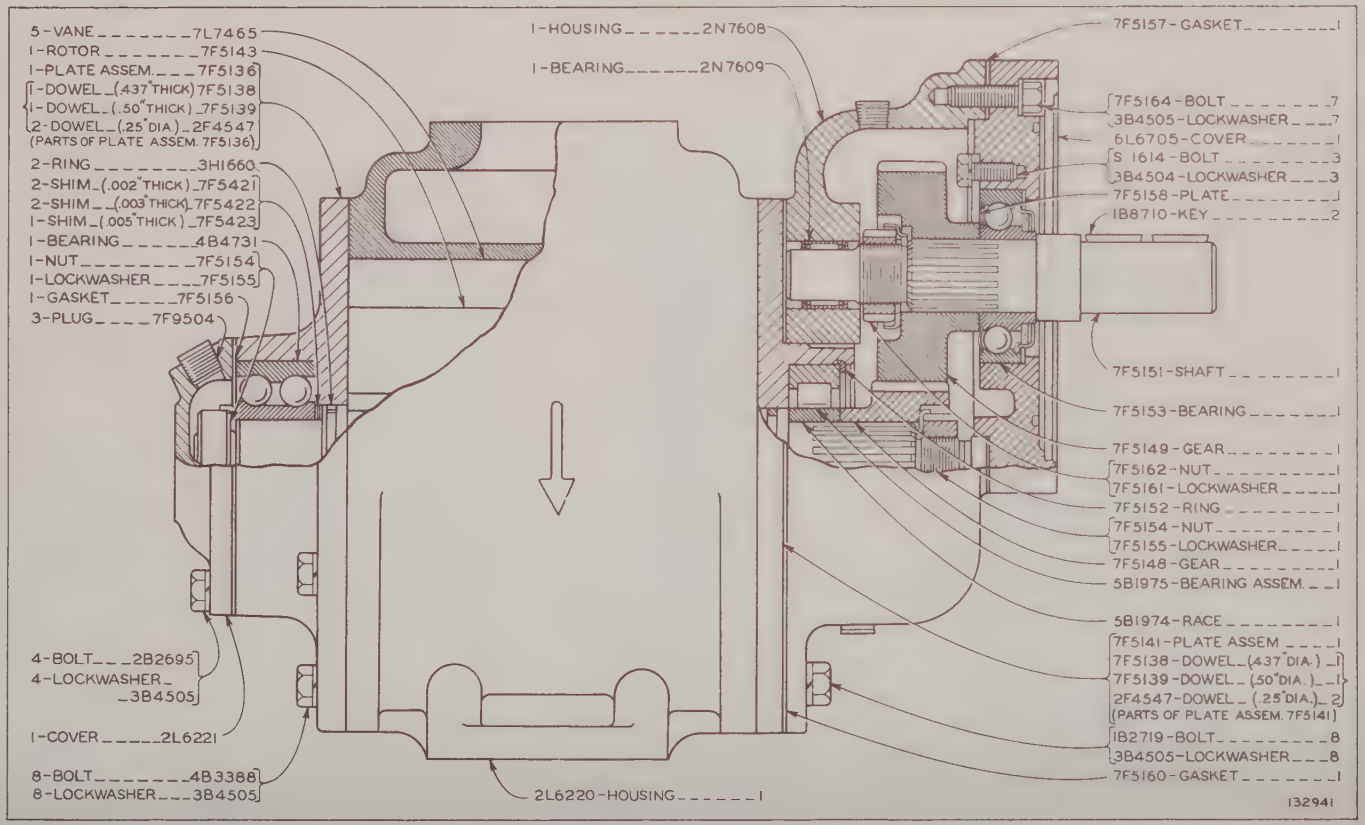
Part of 5L5427, 5L5428 Air Starting Motor and 4N4985 Air Start Changeover Groups shown on Pages 76, 76A, 76B and 77. 3H3171 Motor parts are shown on Pages 78B and 79



5L5429 AIR STARTING MOTOR ASSEMBLY—Type 2
Part of 5L5427 Air Starting Motor Group shown on Page 76
3H3171 Motor parts are shown on Page 79



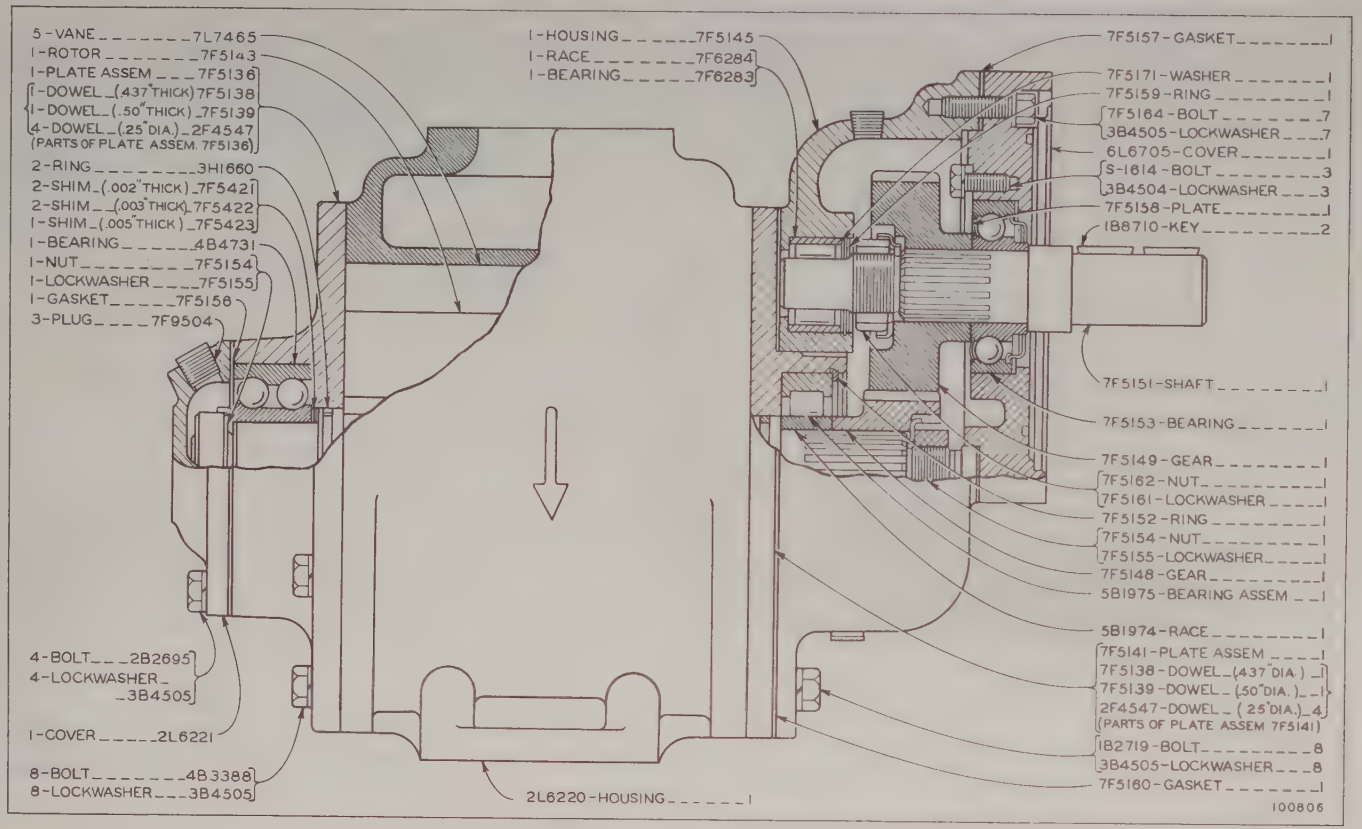
6L6732 AIR STARTING MOTOR ASSEMBLY—Type 2
Part of 5L5427 & 5L5428 Air Starting Motor Groups shown on Pages 76 & 77
3H3171 Motor parts are shown on Page 79

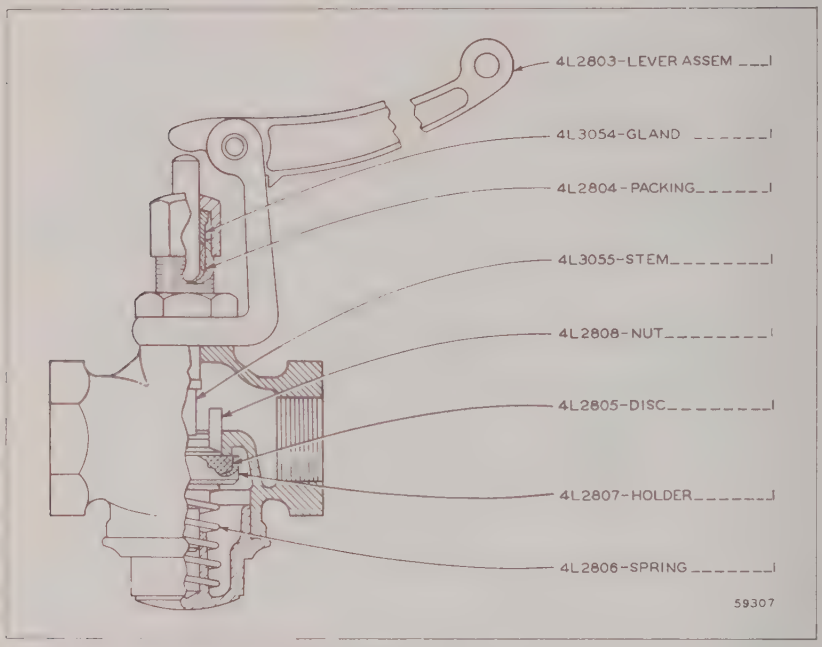


3H3171 AIR MOTOR—Type 2
Part of 5L5429 and 6L6732 Air Starting Motor Assemblies shown on Page 78

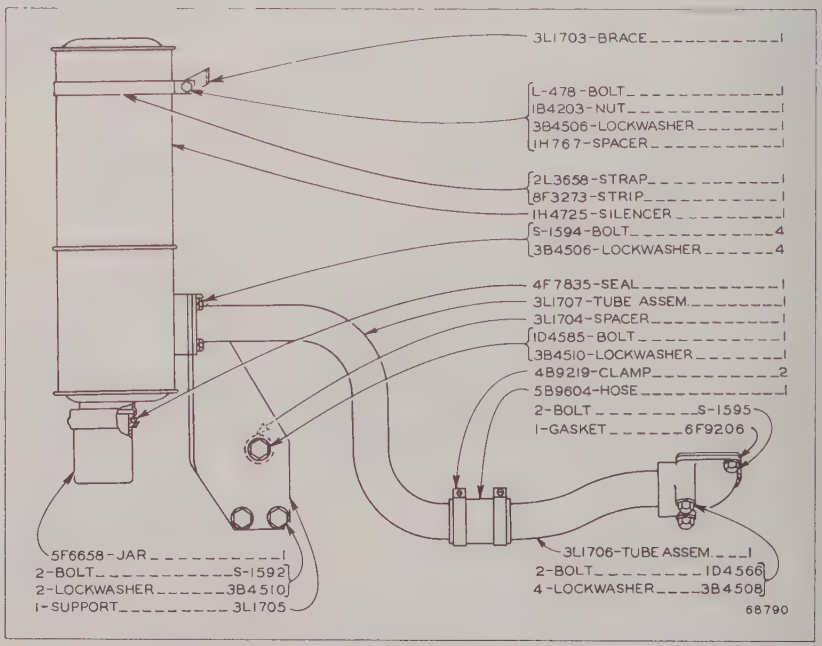
3H3171 AIR MOTOR

PART OF 5L5429 AND 6L6732 AIR STARTING MOTOR ASSEMBLIES

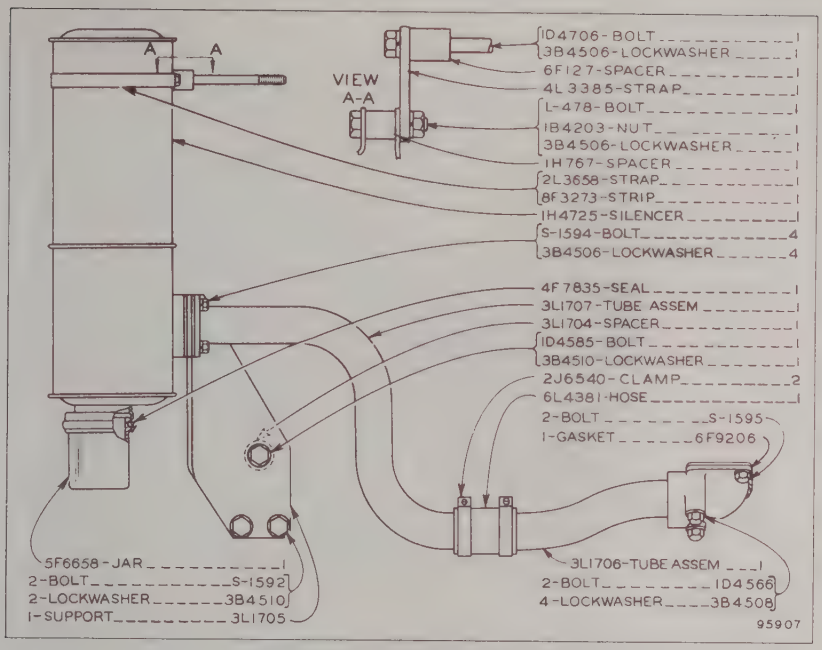




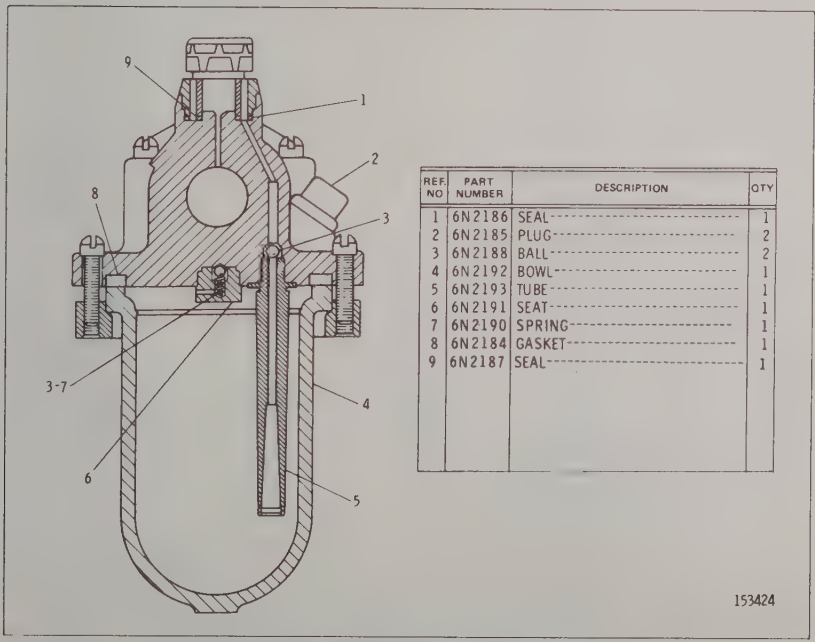
3L9922 WHISTLE VALVE GROUP
Part of 5L5427 and 5L5428 Air Starting Motor Groups shown on Pages 76, 76A & 76B



3L1710 AIR SILENCER GROUP—Left Hand—Type 1—Replaced by 6N6001 shown on Page 80B
FOR USE WITH LEFT HAND AIR STARTING

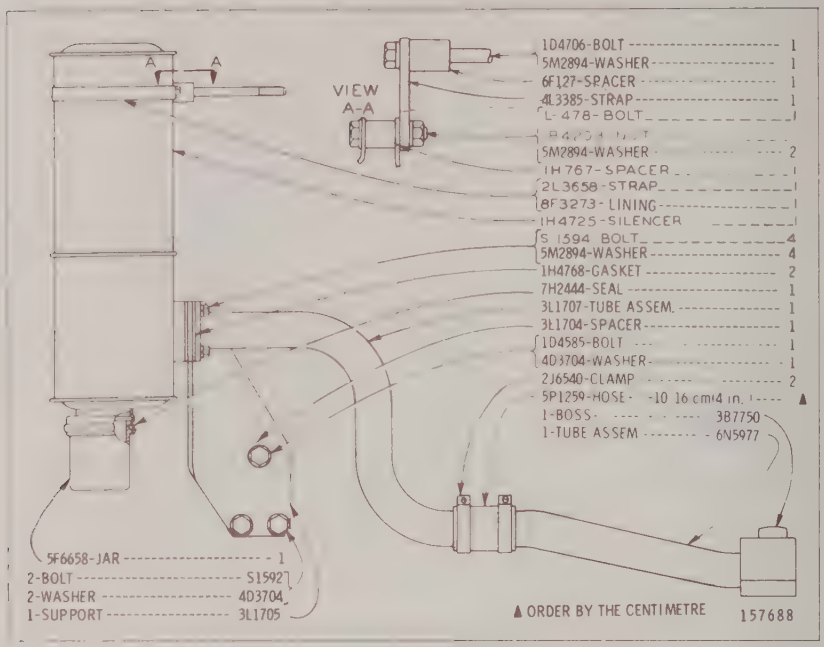


3L1710 AIR SILENCER GROUP—Left Hand—Type 2—
Replaced by 6N6001 shown on Page 80B
For use with Left Hand Air Starting

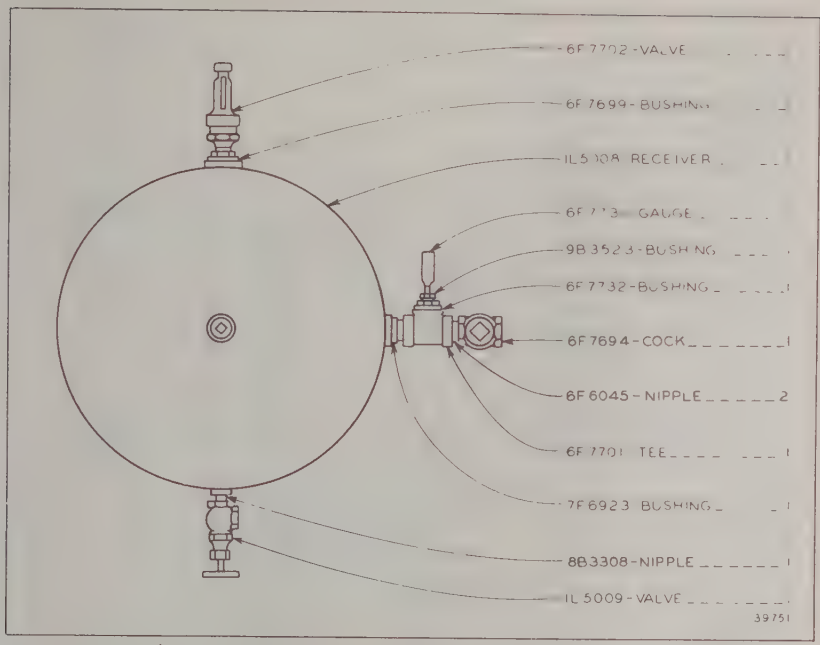


REF. NO	PART NUMBER	DESCRIPTION	QTY
1	6N2186	SEAL	1
2	6N2185	PLUG	2
3	6N2188	BALL	2
4	6N2192	BOWL	1
5	6N2193	TUBE	1
6	6N2191	SEAT	1
7	6N2190	SPRING	1
8	6N2184	GASKET	1
9	6N2187	SEAL	1

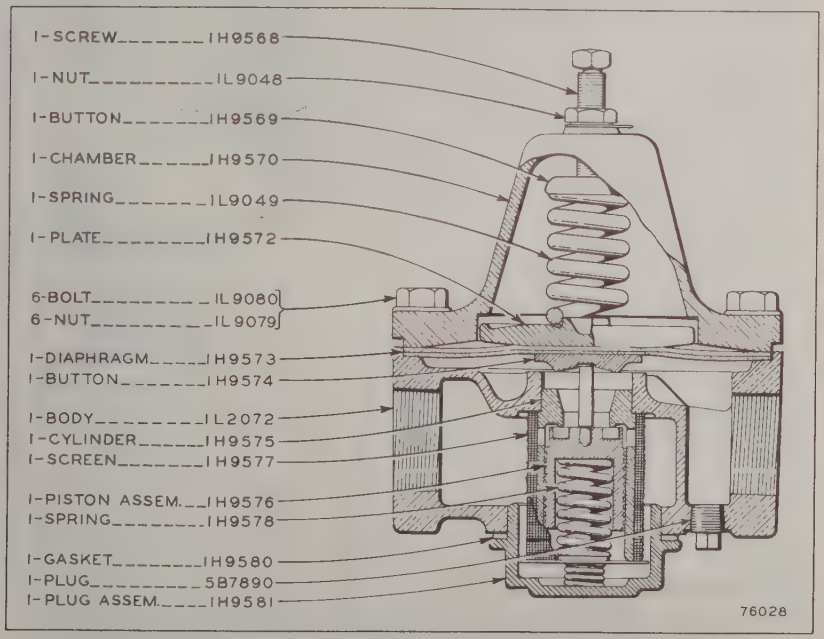
4N7556 AIR MOTOR LUBRICATOR GROUP
Part of 5L5427 and 5L5428 Air Starting Motor Groups
shown on Pages 76A and 76B



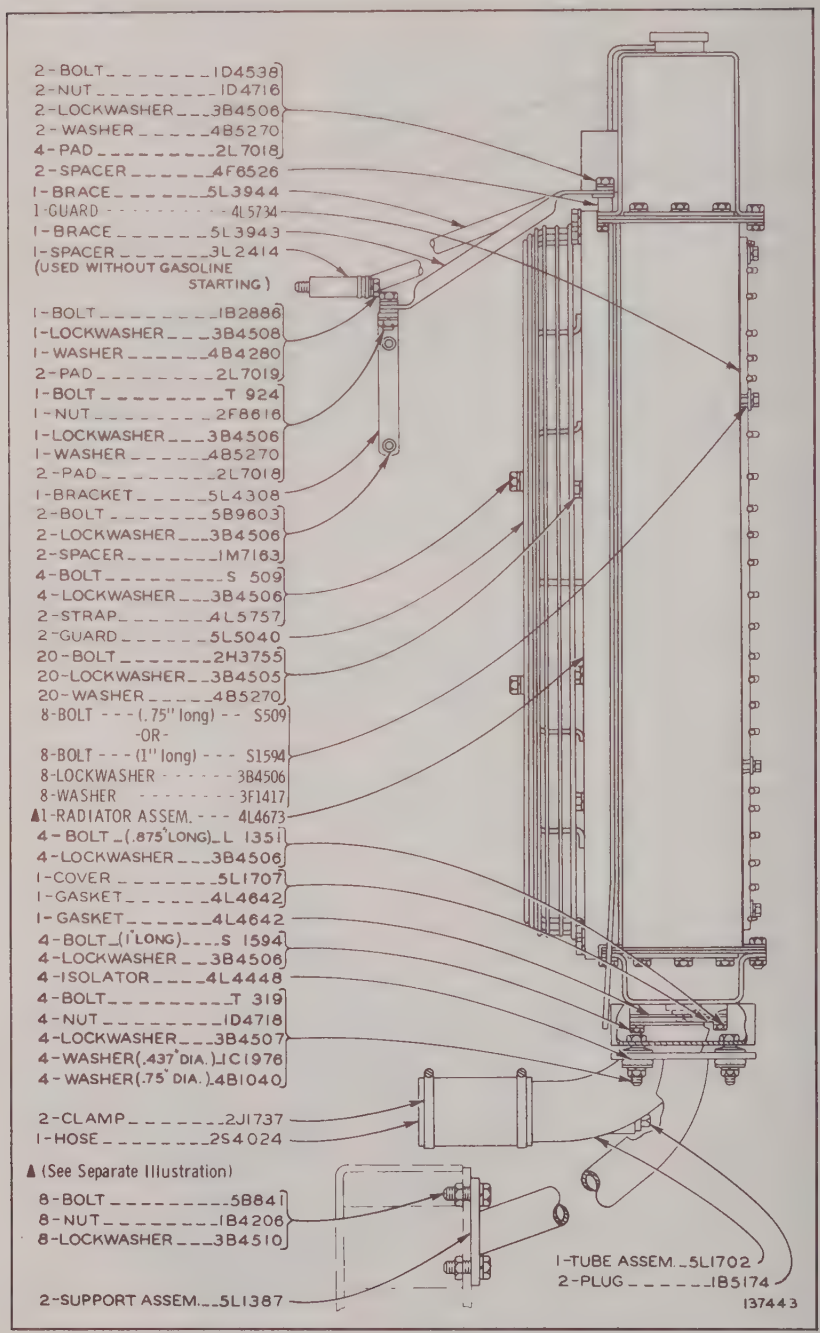
6N6001 AIR SILENCER GROUP—Left Hand



IL5010 AIR RECEIVER GROUP—10.5 Cubic Foot Capacity
FOR USE WITH AIR STARTING



IL2073 PRESSURE REDUCING REGULATING VALVE
FOR USE WITH AIR STARTING

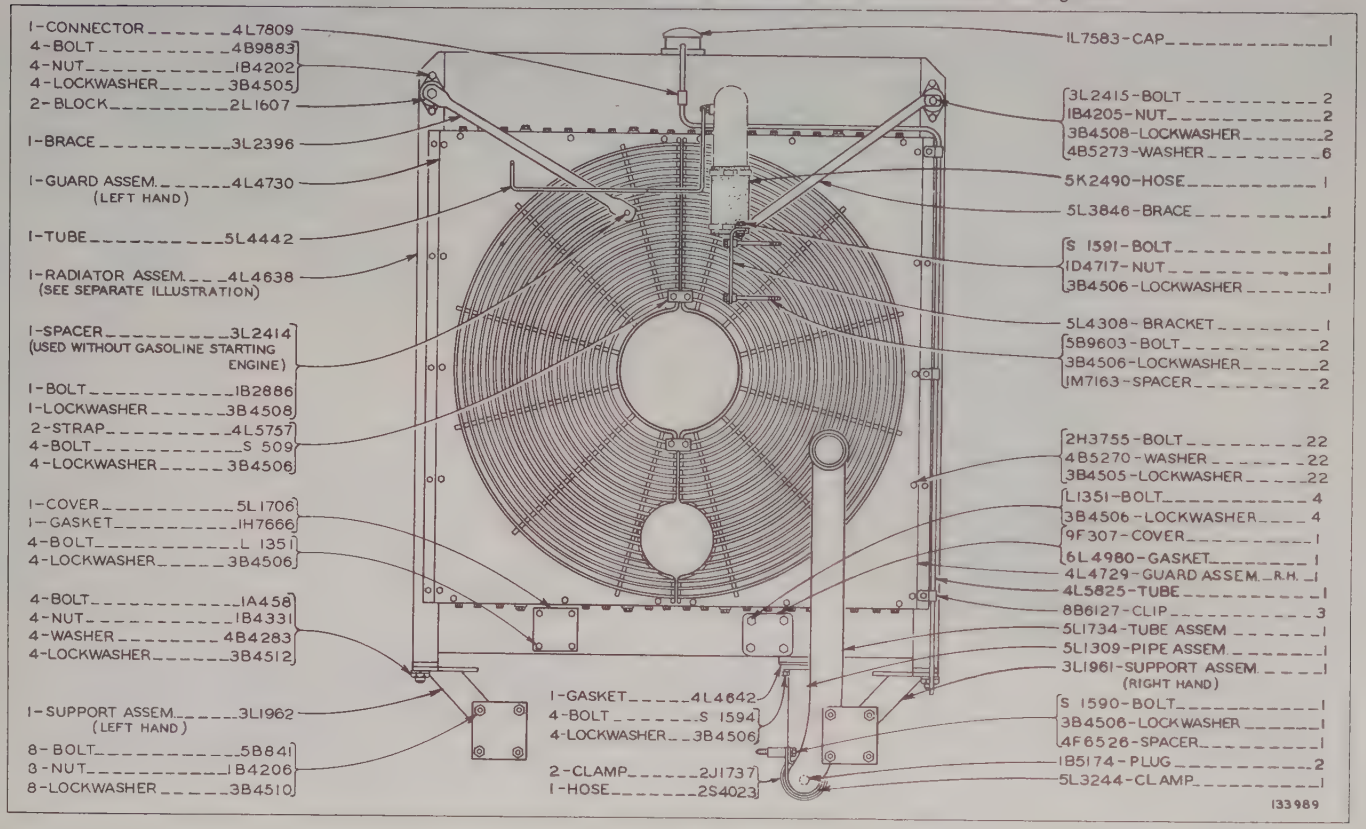


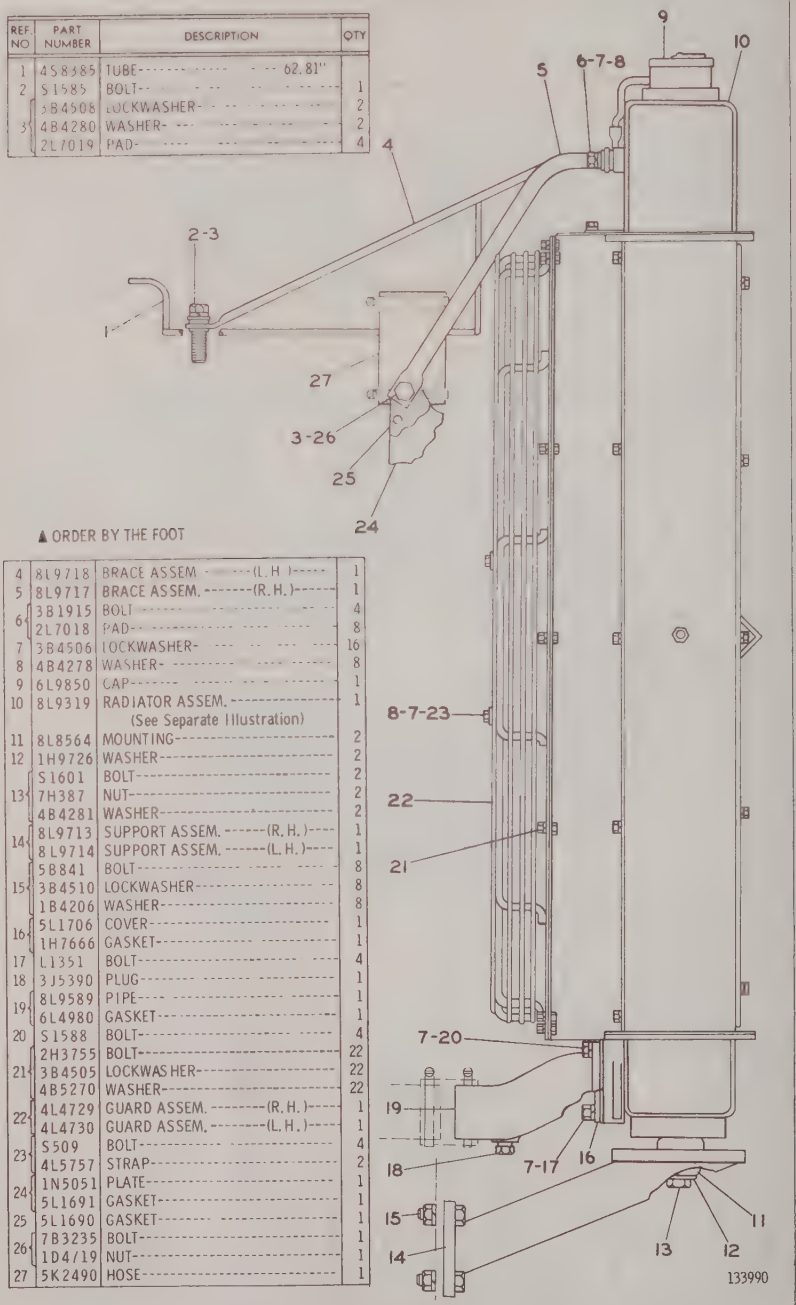
5L1675 RADIATOR GROUP—Replaced by 7L7423 shown on Page 84A
4L4673 Radiator parts are shown on Pages 84 and 84B. Only separate parts serviced. When complete Group is required order 7L7423 shown on Page 84A

5L1676 RADIATOR GROUP—High Capacity

4L4638 Radiator parts are shown on Page 85

Only separate parts serviced. When complete group is required order 1N5006 shown on Page 83B





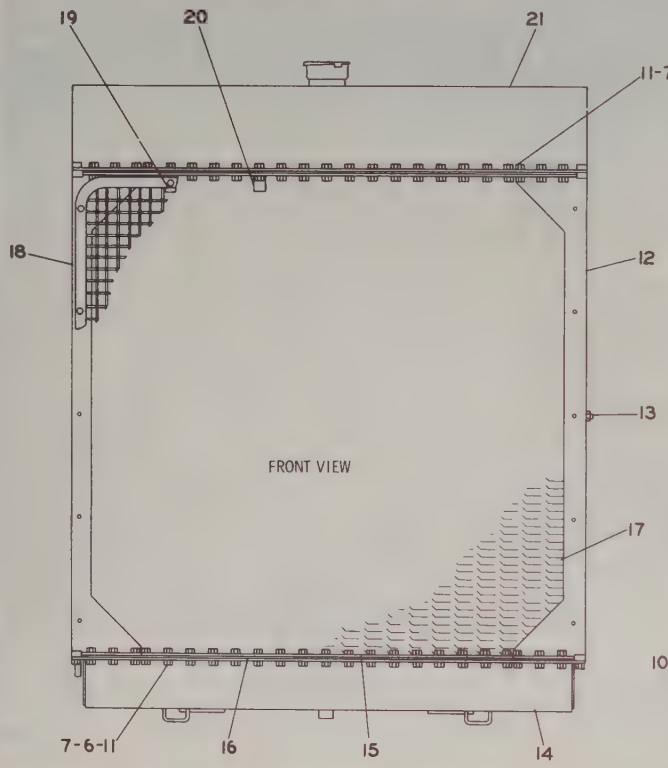
REF. NO	PART NUMBER	DESCRIPTION	QTY
▲ 1	4S8385	TUBE---62.81"	
2	S1585	BOLT	1
3	3B4508	LOCKWASHER	2
	4B4280	WASHER	2
	2L7019	PAD	4

▲ ORDER BY THE FOOT

4	8L9718	BRACE ASSEM.---(L. H.)---	1
5	8L9717	BRACE ASSEM.---(R. H.)---	1
6	3B1915	BOLT	4
	2L7018	PAD	8
7	3B4506	LOCKWASHER	16
8	4B4278	WASHER	8
9	6L9850	CAP	1
10	8L9319	RADIATOR ASSEM. (See Separate Illustration)	1
11	8L8564	MOUNTING	2
12	1H9726	WASHER	2
13	S1601	BOLT	2
	7H387	NUT	2
	4B4281	WASHER	2
14	8L9713	SUPPORT ASSEM.---(R. H.)---	1
	8L9714	SUPPORT ASSEM.---(L. H.)---	1
15	5B841	BOLT	8
	3B4510	LOCKWASHER	8
	1B4206	WASHER	8
16	5L1706	COVER	1
	1H7666	GASKET	1
17	L1351	BOLT	4
18	3J5390	PLUG	1
19	8L9589	PIPE	1
	6L4980	GASKET	1
20	S1588	BOLT	4
21	2H3755	BOLT	22
	3B4505	LOCKWASHER	22
	4B5270	WASHER	22
22	4L4729	GUARD ASSEM.---(R. H.)---	1
	4L4730	GUARD ASSEM.---(L. H.)---	1
23	S509	BOLT	4
	4L5757	STRAP	2
24	1N5051	PLATE	1
	5L1691	GASKET	1
25	5L1690	GASKET	1
26	7B3235	BOLT	1
	1D4719	NUT	1
27	5K2490	HOSE	1

1N5006 RADIATOR GROUP—High Capacity

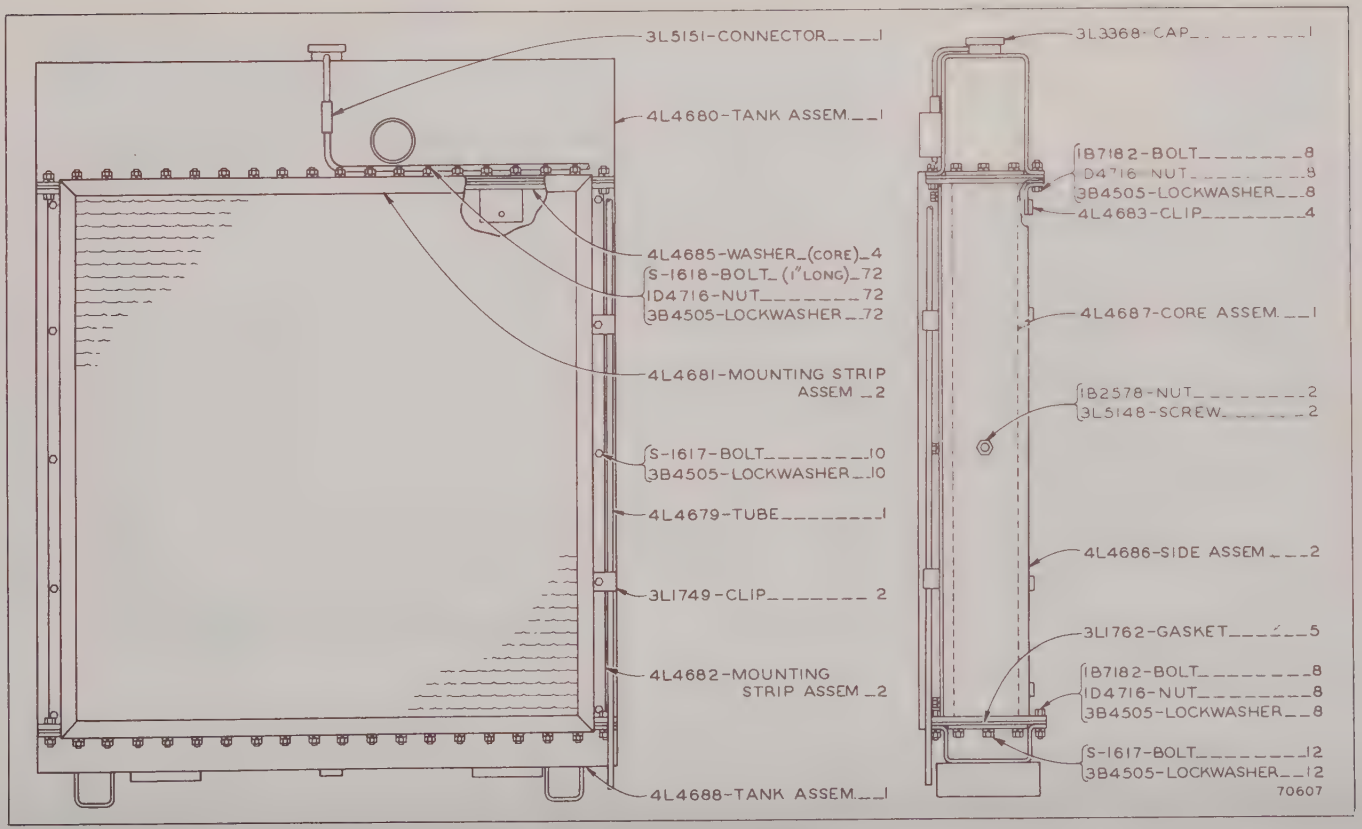
8L9319 RADIATOR ASSEMBLY
Part of 1N5006 Radiator Group



REF. NO.	PART NUMBER	DESCRIPTION	QTY
1	2N5129	FRAME ASSEM. -------(Top)--------	1
2	3L5088	CLIP----------	8
▲ 3	3S7640	HOSE----------72"	
4	2N5132	CLIP----------	3
5	2N5128	FRAME ASSEM. -----(Side)--------	2
6	S1617	BOLT----------	30
7	3B4505	LOCKWASHER----------	126
8	2H3755	BOLT----------	8
9	2N5130	FRAME ASSEM. -----(Bottom)------	1
10	S1616	BOLT----------	18
	3B4504	LOCKWASHER----------	18
11	S1618	BOLT----------	88
	1D4716	NUT----------	88
12	2N5124	SIDE ASSEM. ----------	2
13	7S626	SCREW----------	2
	1B2578	NUT----------	2
14	2N5123	TANK ASSEM. ------(Bottom)------	1
15	2N5126	WASHER----------	4
16	3L1762	GASKET----------	6
17	2N5125	CORE ASSEM. ----------	1
18	2N5127	GUARD ASSEM. ----------	1
19	5B1345	CLIP----------	2
20	2N5131	CLIP ASSEM. ----------	8
21	2N5122	TANK ASSEM. -------(Top)--------	1

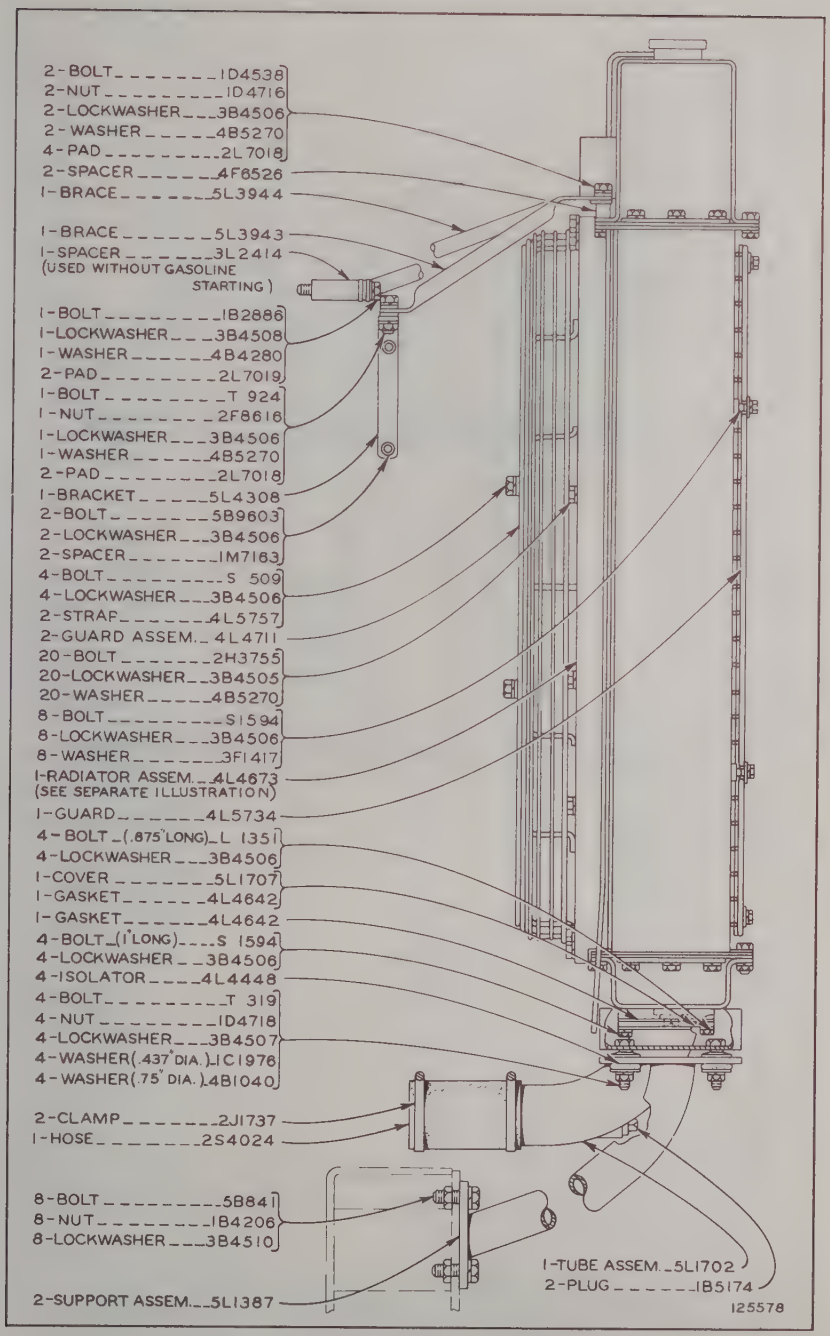
132221

▲ ORDER BY THE INCH



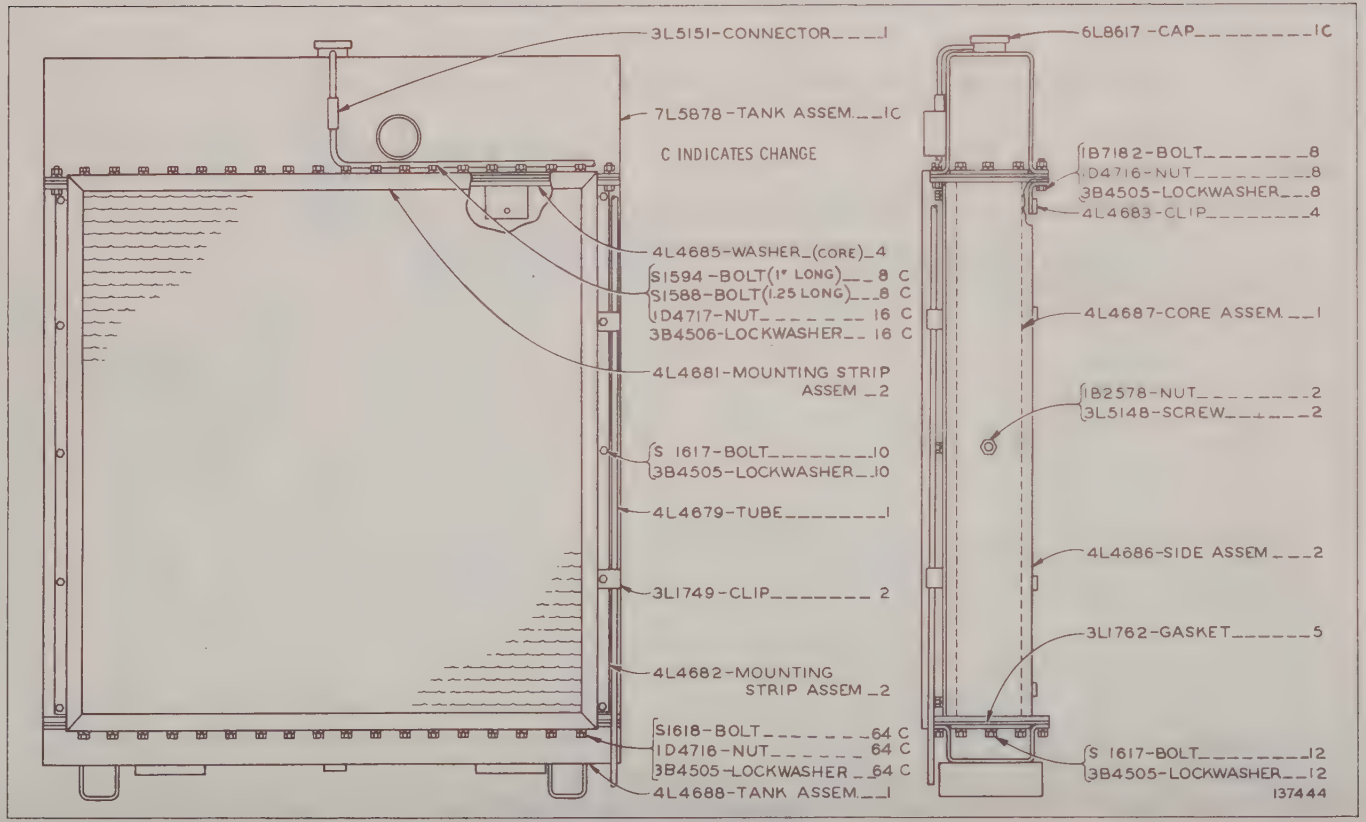
4L4673 RADIATOR ASSEMBLY

Part of 5L1675 Radiator Group shown on Page 82



7L7423 RADIATOR GROUP

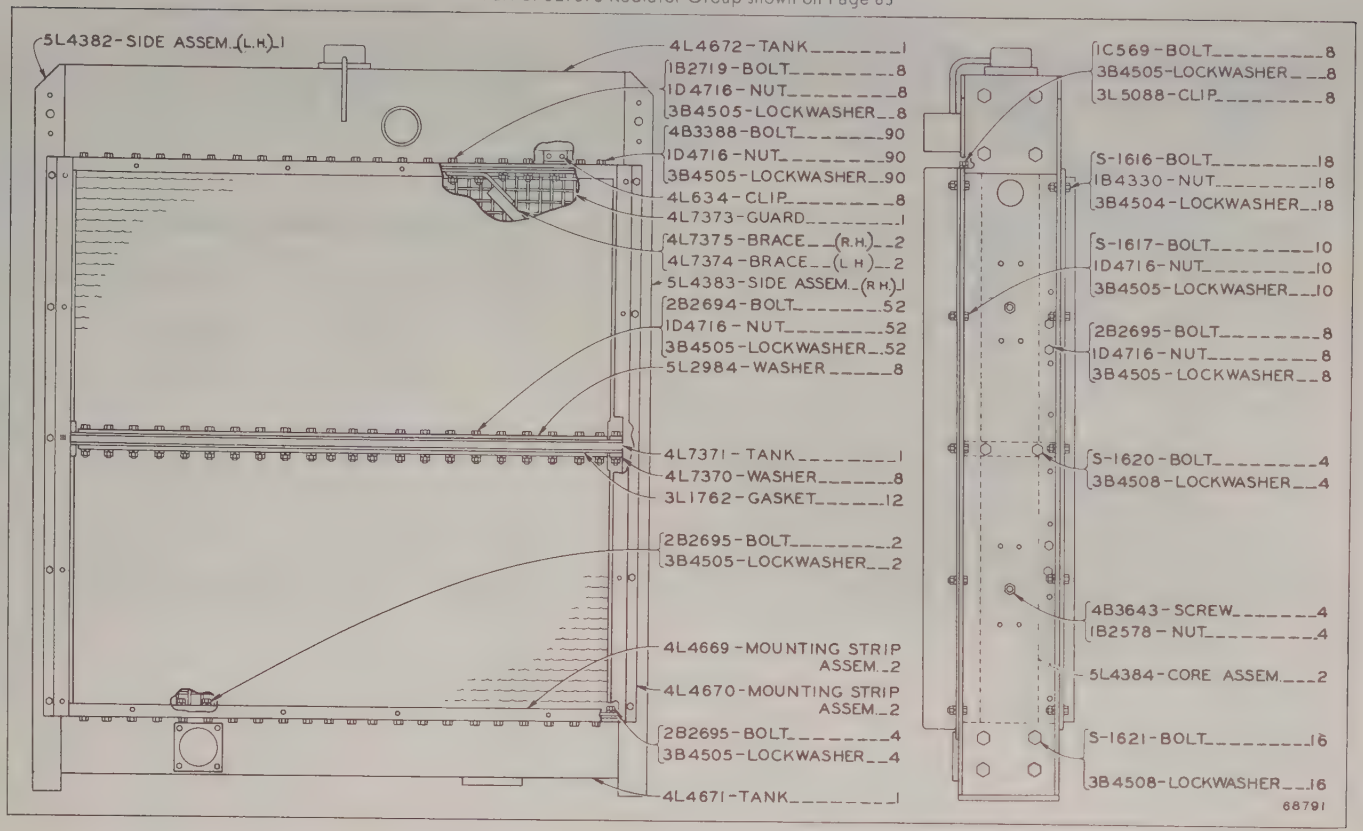
4L4673 Radiator parts are shown on Page 84 and 84B

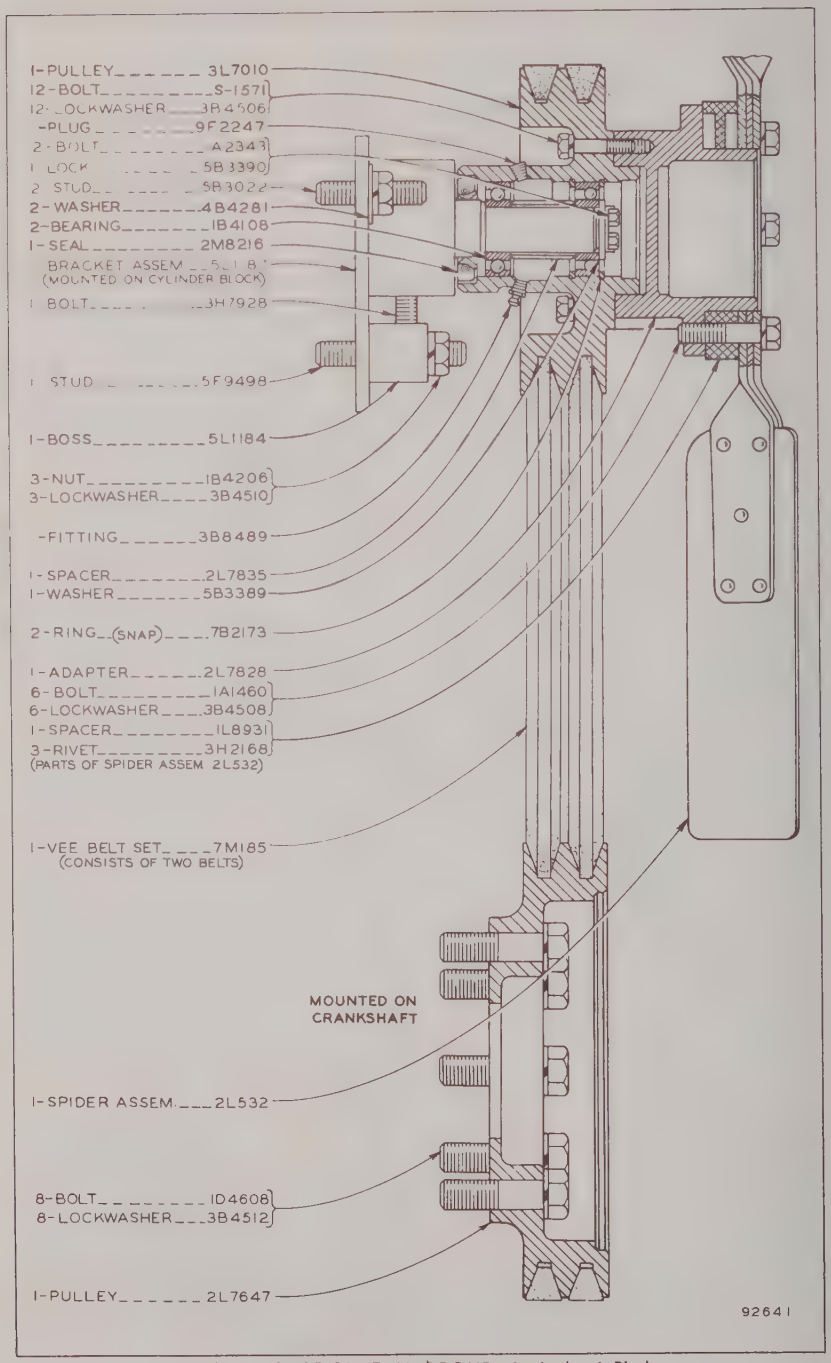


4L4673 RADIATOR ASSEMBLY—Type 2
Part of 5L1675 and 7L7423 Radiator Groups shown on Pages 82 and 84A

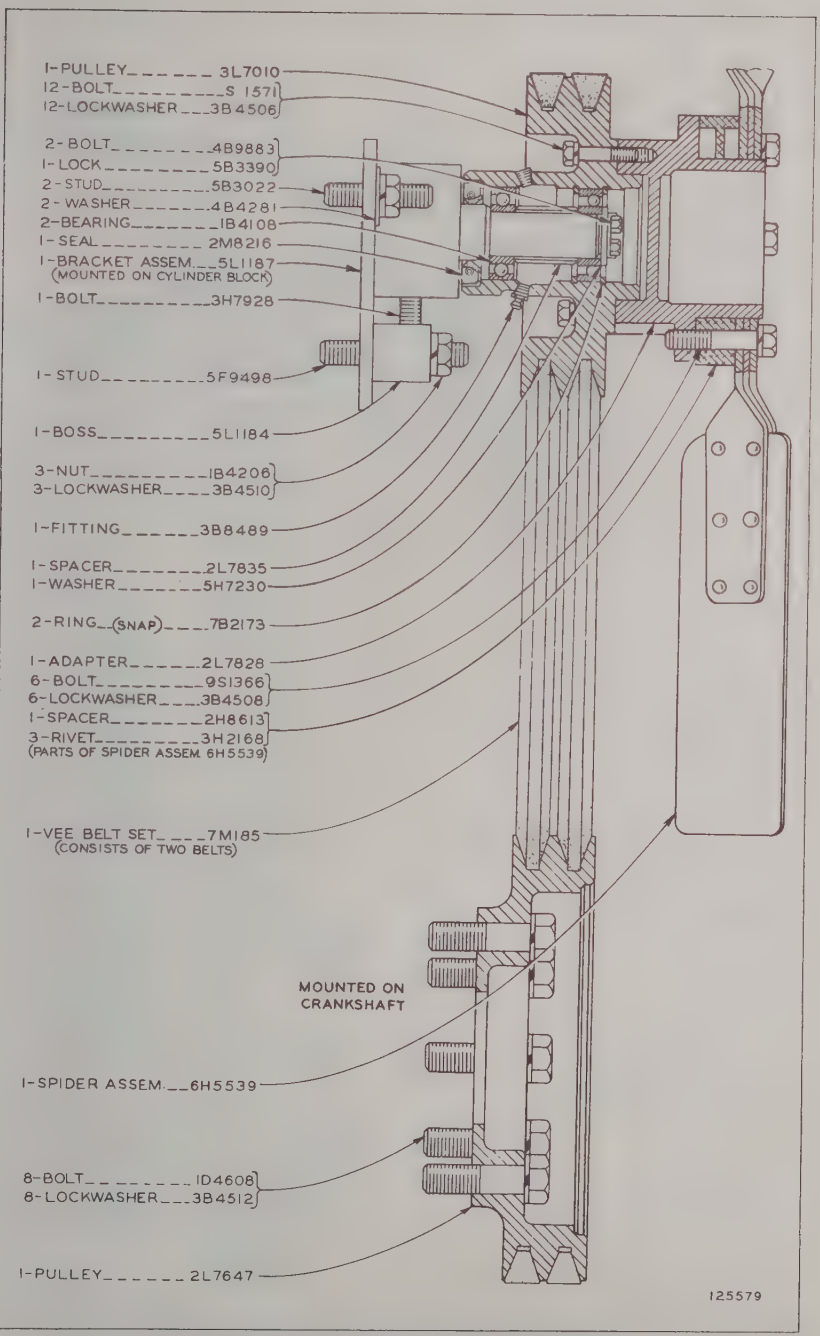
4L4638 RADIATOR ASSEMBLY

Part of 5L1676 Radiator Group shown on Page 83

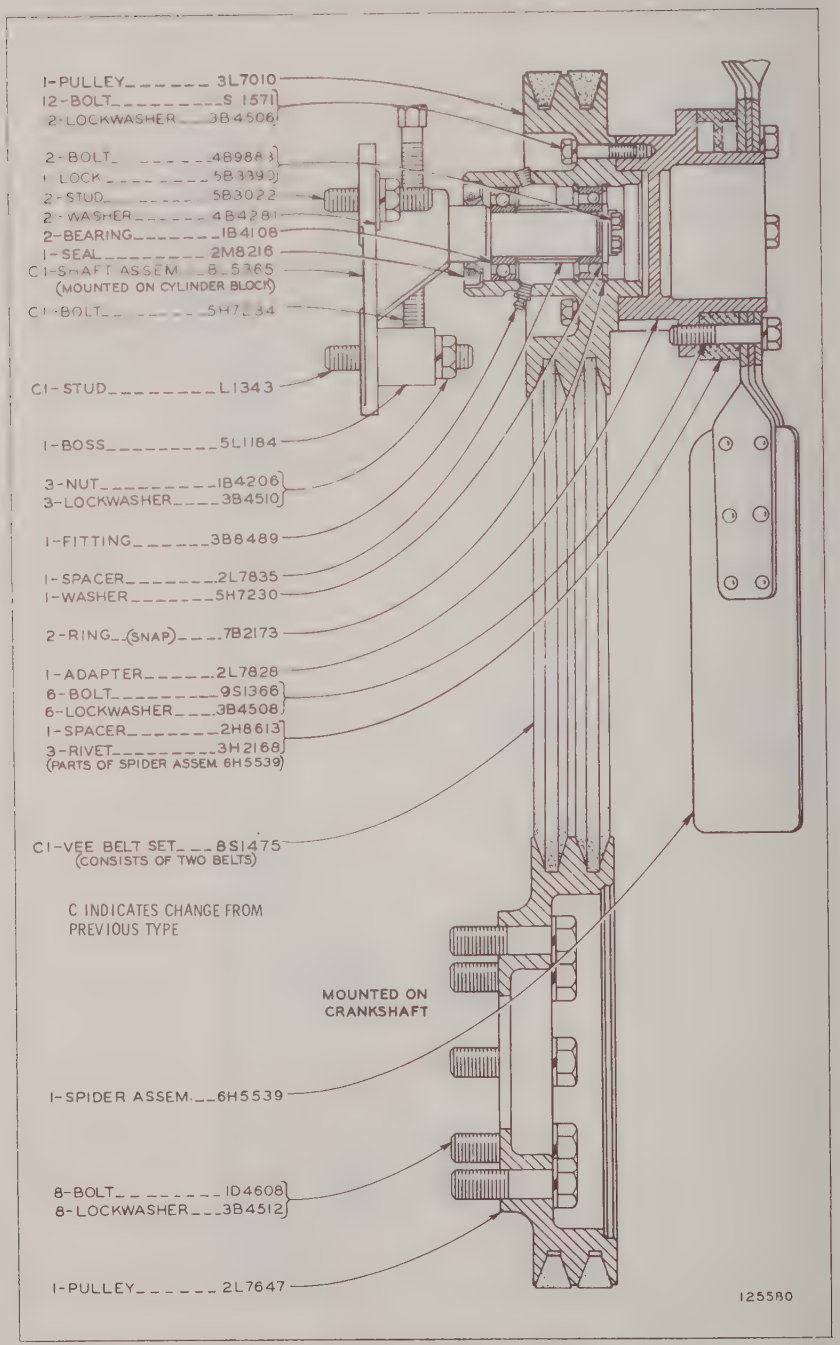




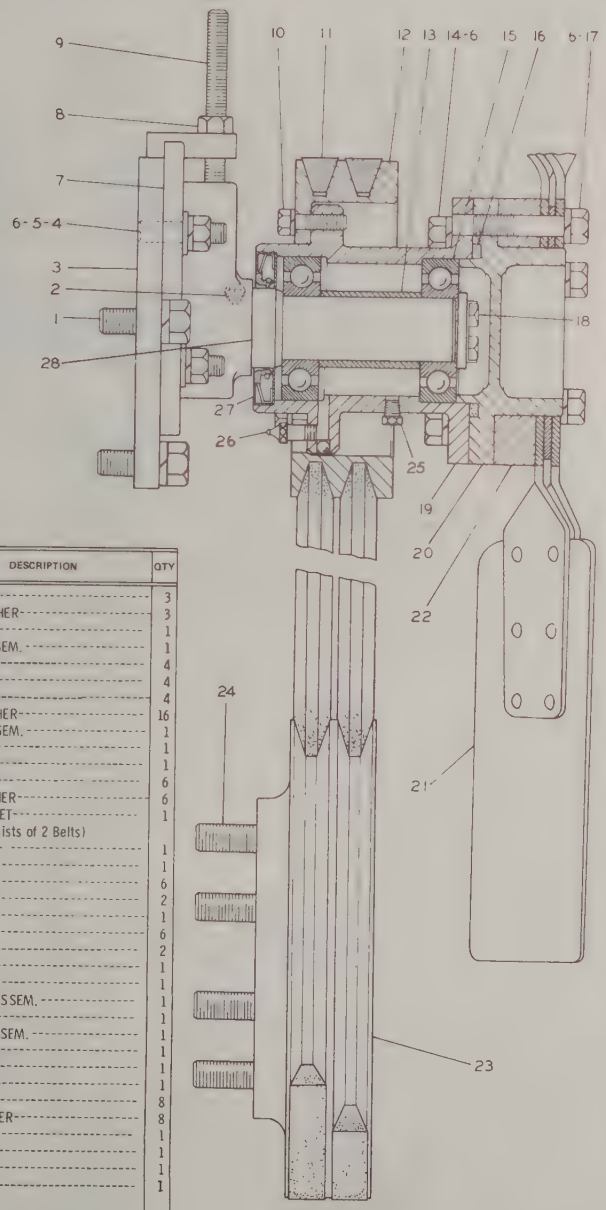
5L1181 SUCTION FAN GROUP—31 Inch—8 Blade
FOR USE WITH 5L1675 RADIATOR GROUP SHOWN ON PAGE 82



7L7424 SUCTION FAN GROUP—33"—6 Blade—Type 1
FOR USE WITH 7L7423 RADIATOR GROUP SHOWN ON PAGE 84A



7L7424 SUCTION FAN GROUP—33"—6 Blade—Type 2
FOR USE WITH 7L7423 RADIATOR GROUP SHOWN ON PAGE 84A
Only separate parts serviced. When complete Group is required order 2N7557

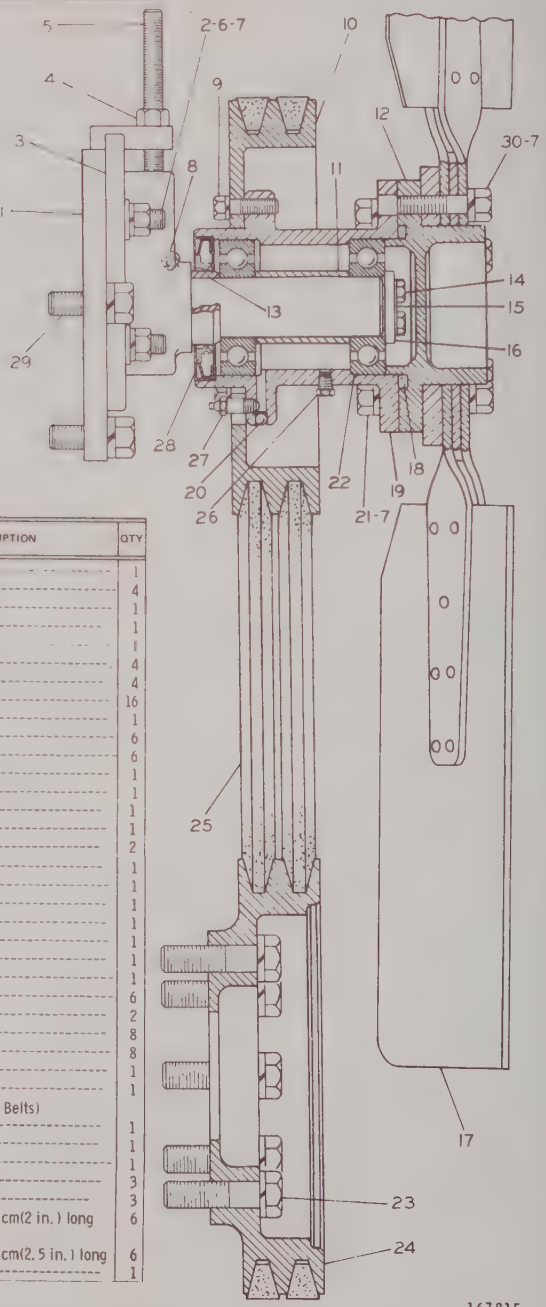


	REF NO.	PART NUMBER	DESCRIPTION	QTY
	1	S1589	BOLT	3
		3B4510	LOCKWASHER	3
	2	4B4550	FITTING	1
	3	2N8574	PLATE ASSEM.	1
C	4	1Y7945	STUD	4
	5	1B4205	NUT	4
		8M4791	WASHER	4
	6	3B4508	LOCKWASHER	16
	7	2N7505	SHAFT ASSEM.	1
	8	1D4719	NUT	1
	9	3N704	STUD	1
	10	5S7382	BOLT	6
		3B4506	LOCKWASHER	6
	11	8S1475	VEE BELT SET (Consists of 2 Belts)	1
	12	2N7494	PULLEY	1
	13	2N7506	SPACER	1
C	14	6H1717	BOLT	6
	15	2H3712	BEARING	2
C	16	5H7704	SEAL	1
C	17	2B947	BOLT	6
C		4B9883	BOLT	2
	18	2N7508	LOCK	1
		2N7507	WASHER	1
	19	3N680	CARRIER ASSEM.	1
C	20	4N5283	HUB	1
	21	6H5539	SPIDER ASSEM.	1
	22	2H8613	SPACER	1
		3H2168	RIVET	1
	23	2L7647	PULLEY	1
	24	1D4608	BOLT	8
		3B4512	LOCKWASHER	8
	25	5M6214	PLUG	1
	26	2D4867	FITTING	1
	27	7M4236	SEAL	1
C	28	2N7504	SLEEVE	1

C INDICATES CHANGE

232036

2N7557 SUCTION FAN GROUP—33"—6 Blade
FOR USE WITH 7L7423 RADIATOR GROUP SHOWN ON PAGE 84A

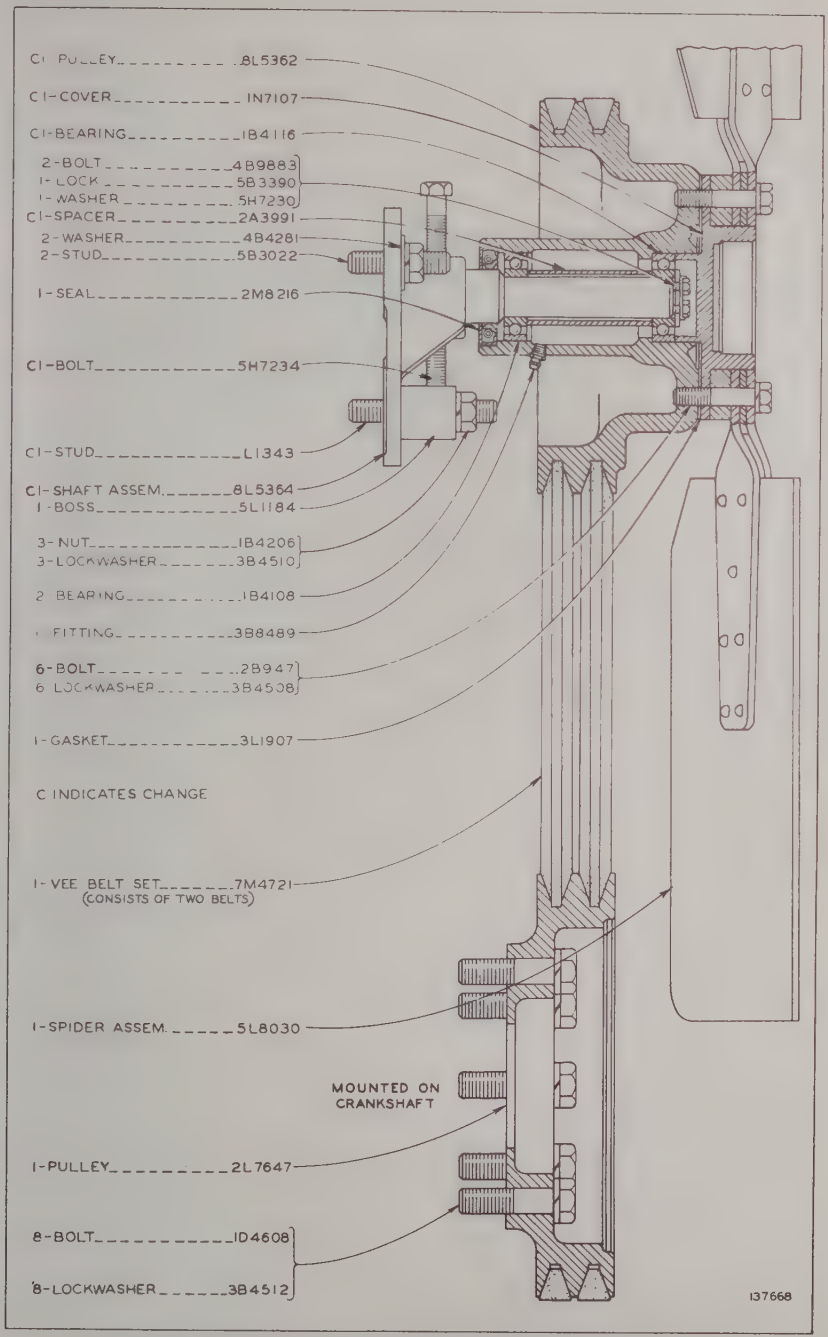


	REF NO	PART NUMBER	DESCRIPTION	QTY
	1	2N8574	PLATE ASSEM.	1
C	2	1Y7945	STUD	4
	3	2N7505	SHAFT ASSEM.	1
	4	1D4719	NUT	1
	5	3N704	STUD	1
	6	1B4205	NUT	4
		8M4791	WASHER	4
	7	3B4508	LOCKWASHER	16
	8	4B4550	FITTING	1
	9	5S7382	BOLT	6
		3B4506	LOCKWASHER	6
	10	2N7495	PULLEY	1
	11	2N7506	SPACER	1
C	12	4N5283	HUB	1
C	13	2N7504	SLEEVE	1
C	14	4B9883	BOLT	2
	15	2N7508	LOCK	1
	16	2N7507	WASHER	1
	17	2N7555	SPIDER ASSEM.	1
C	18	5H7704	SEAL	1
	19	3N680	CARRIER ASSEM.	1
		2N7497	CARRIER	1
	20	4B9880	BALL	1
C	21	6H1717	BOLT	6
	22	2H3712	BEARING	2
	23	1D4608	BOLT	8
		3B4512	LOCKWASHER	8
	24	2L7647	PULLEY	1
	25	7M4721	VEE BELT (Includes 2 Belts)	1
	26	5M6214	PLUG	1
	27	2D4867	FITTING	1
	28	7M4236	SEAL	1
	29	9S1589	BOLT	3
		3B4510	LOCKWASHER	3
		1A1460	BOLT--5.08 cm(2 in.) long	6
			-OR-	
C	30	9S1366	BOLT--6.35 cm(2.5 in.) long	6
C		4N5285	SPACER	1

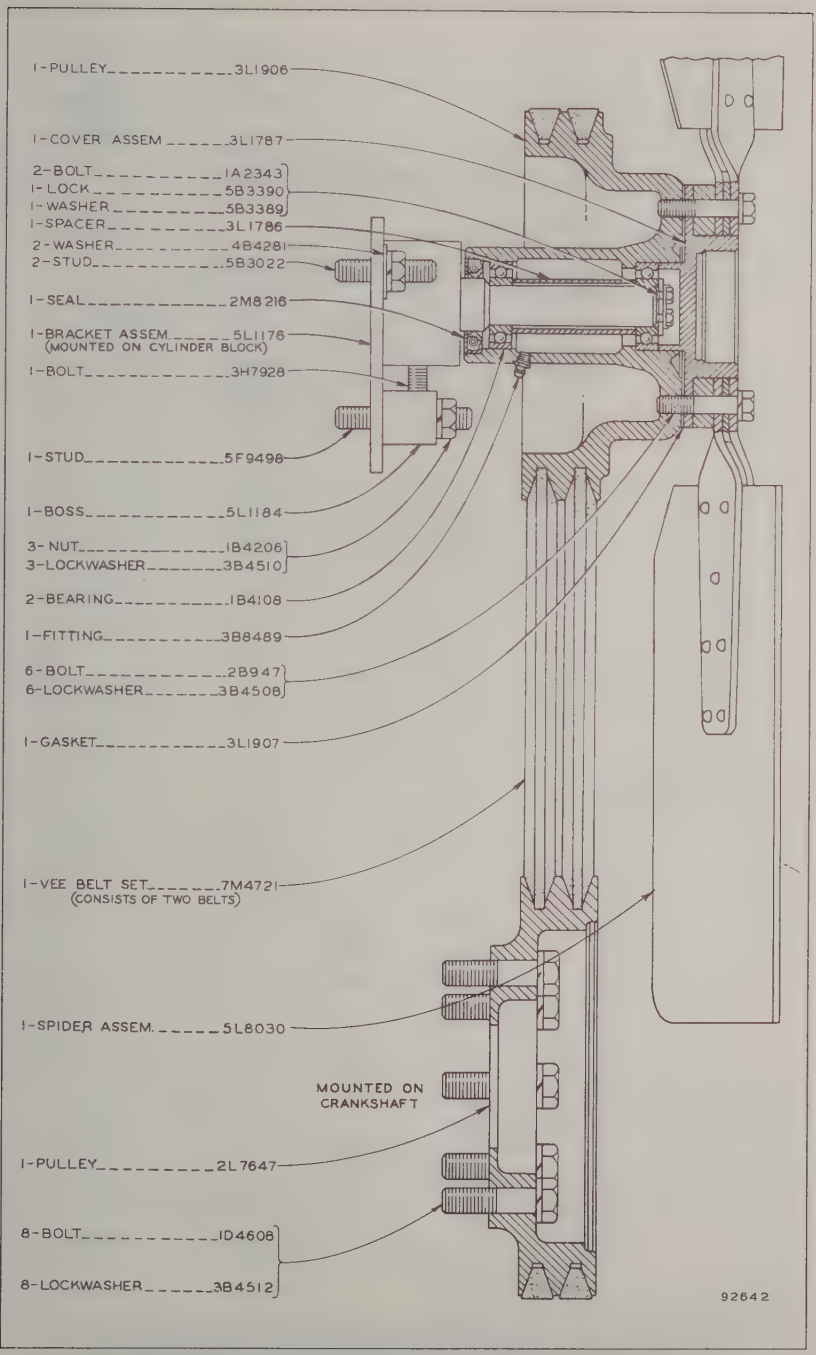
C INDICATES CHANGE

167815

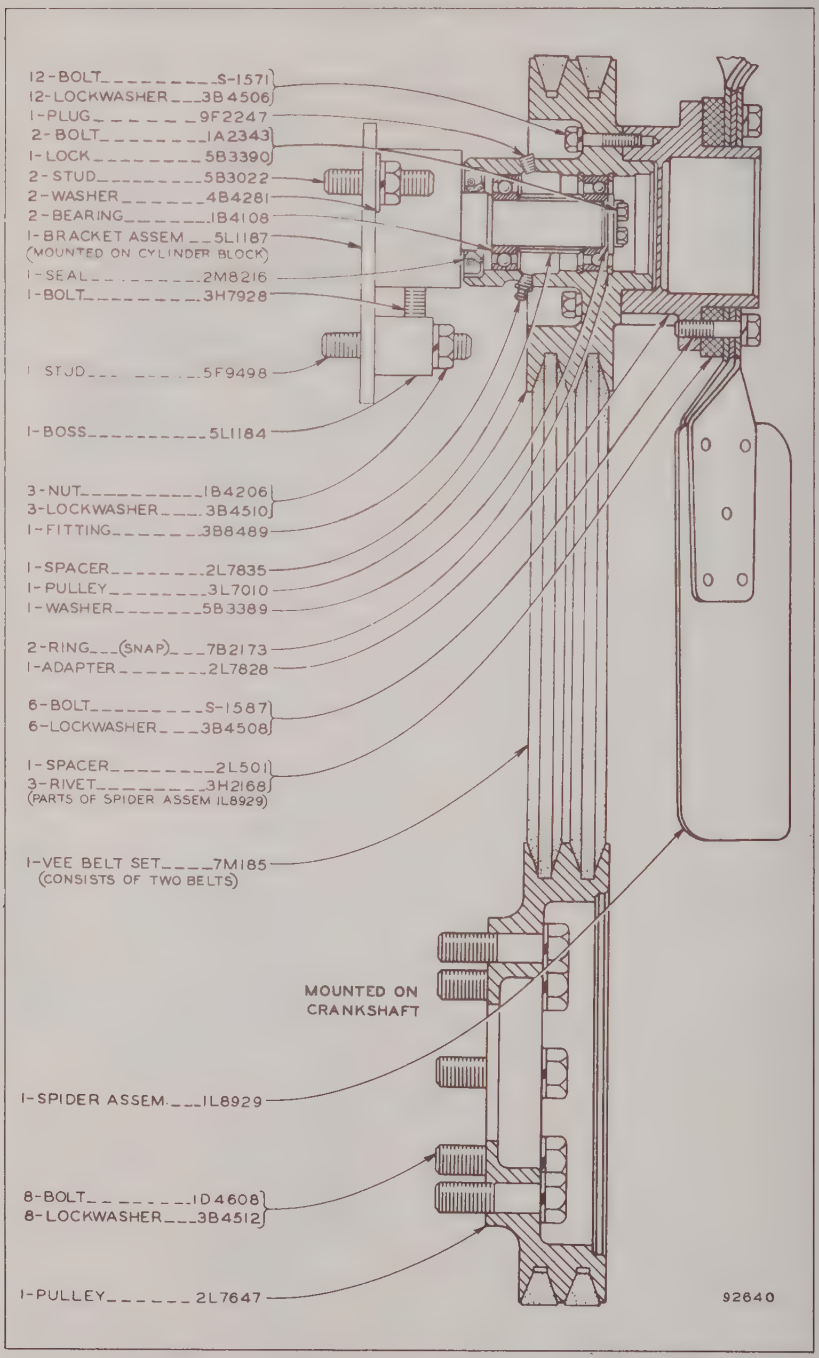
2N7556 SUCTION FAN GROUP—40"—8 Blade
FOR USE WITH 1N5006 RADIATOR GROUP SHOWN ON PAGE 83A



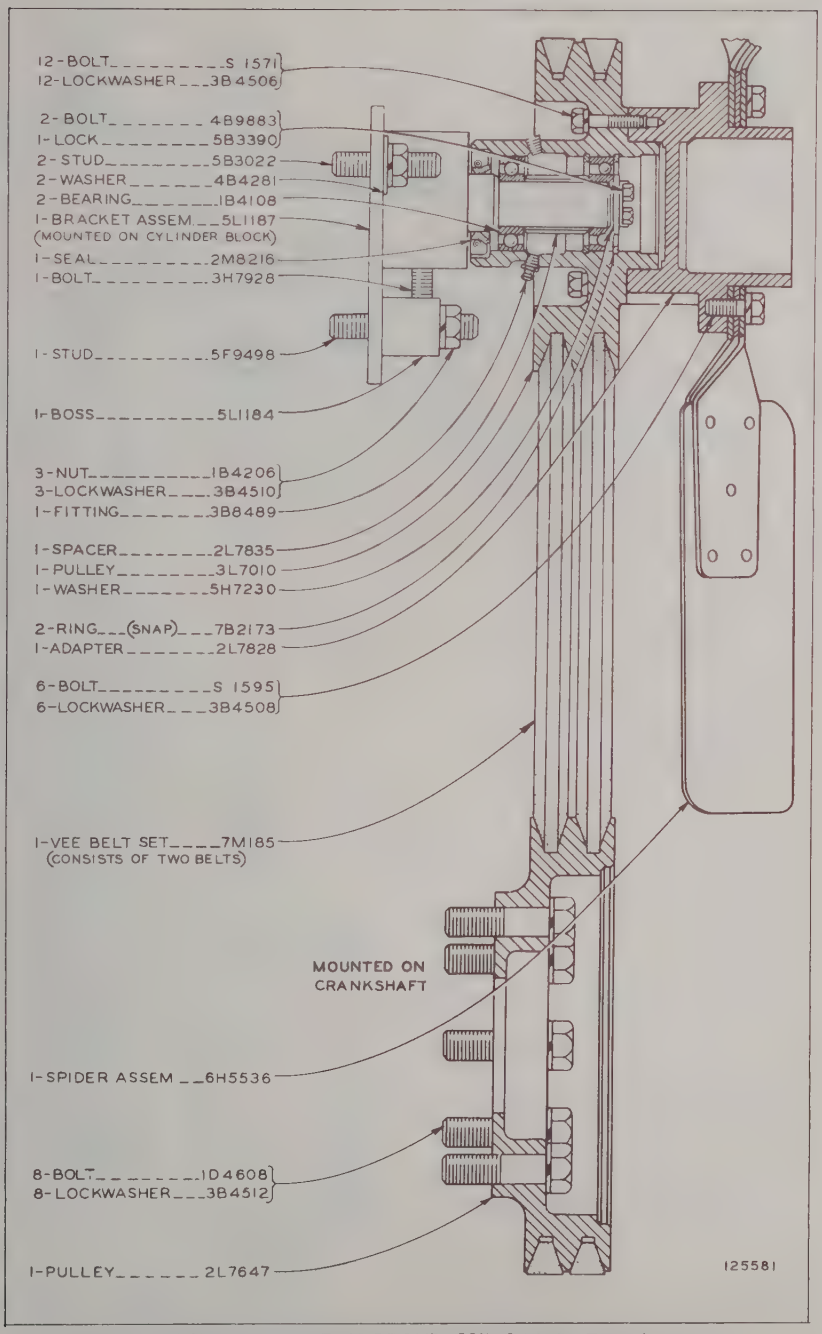
5L1179 SUCTION FAN GROUP—40"—8 Blade
FOR USE WITH 5L1676 RADIATOR GROUP SHOWN ON PAGE 83
Only separate parts serviced. When complete Group is required order 2N7556



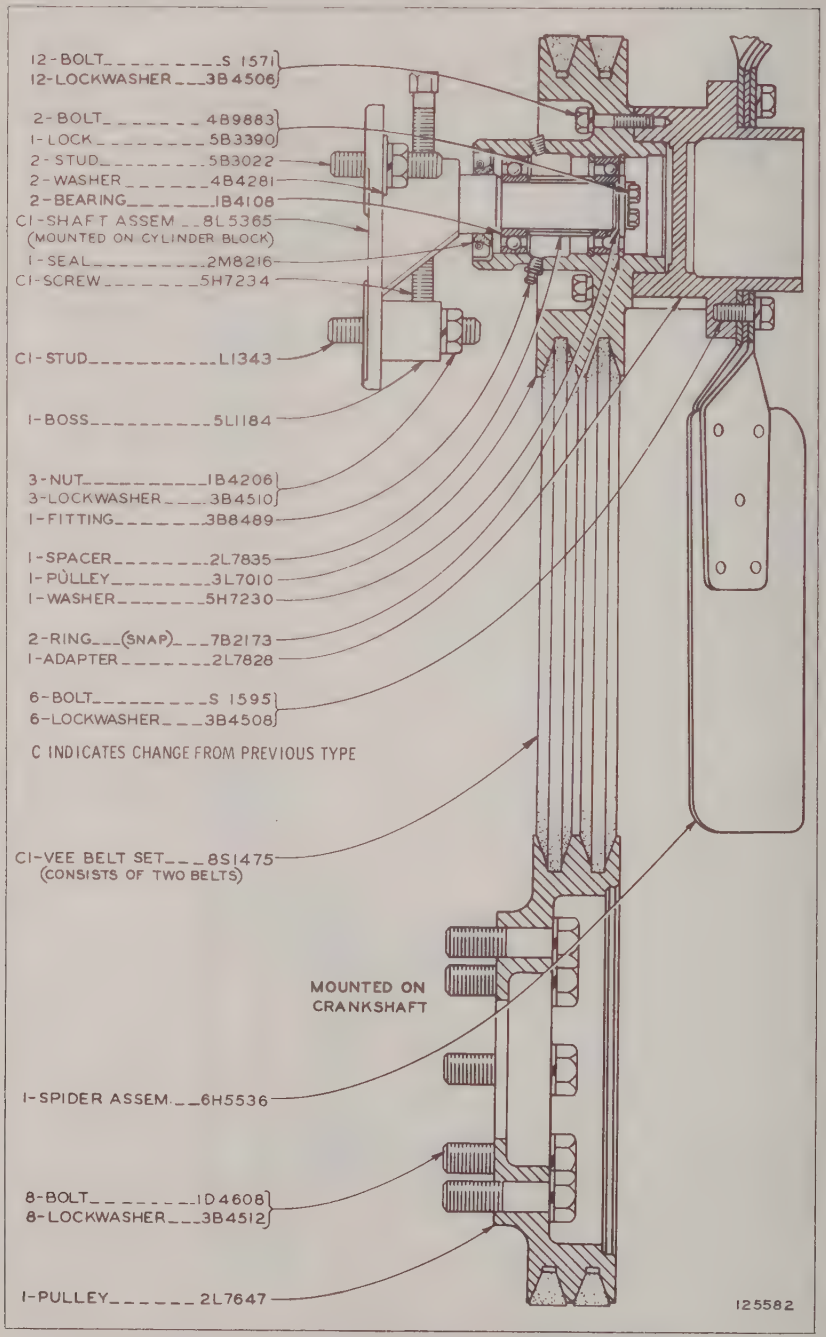
5L1179 SUCTION FAN GROUP—40 Inch—8 Blade
FOR USE WITH 5L1676 RADIATOR GROUP SHOWN ON PAGE 83



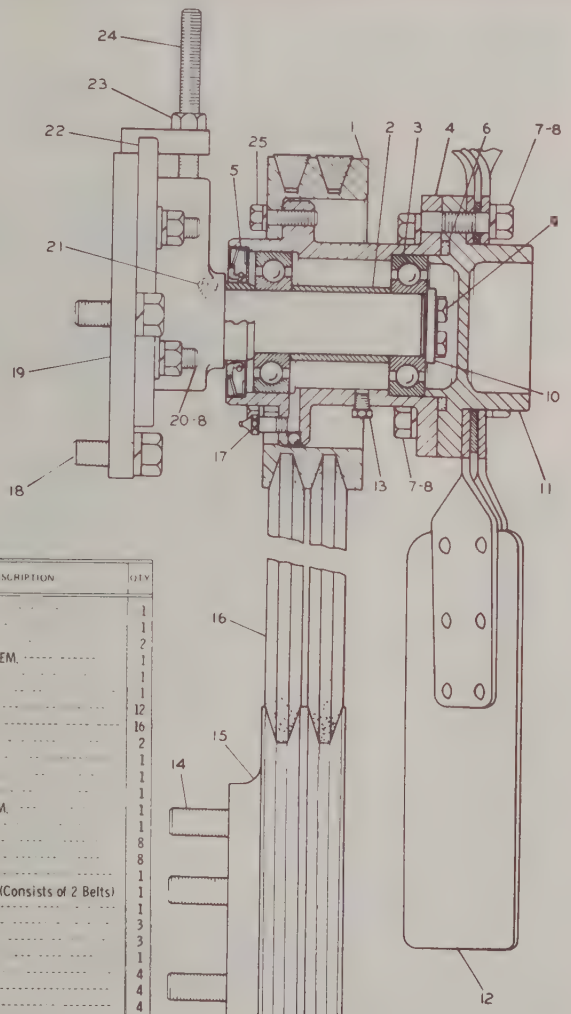
5L1182 BLOWER FAN GROUP—31 Inch—8 Blade
FOR USE WITH 5L1675 RADIATOR GROUP SHOWN ON PAGE 82



7L7425 BLOWER FAN GROUP—33"—6 Blade—Type 1
FOR USE WITH 7L7423 RADIATOR GROUP SHOWN ON PAGE 84A



7L7425 BLOWER FAN GROUP—33"—6 Blade—Type 2
FOR USE WITH 7L7423 RADIATOR GROUP SHOWN ON PAGE 84A
Only separate parts serviced. When complete Group is required order 2N7510

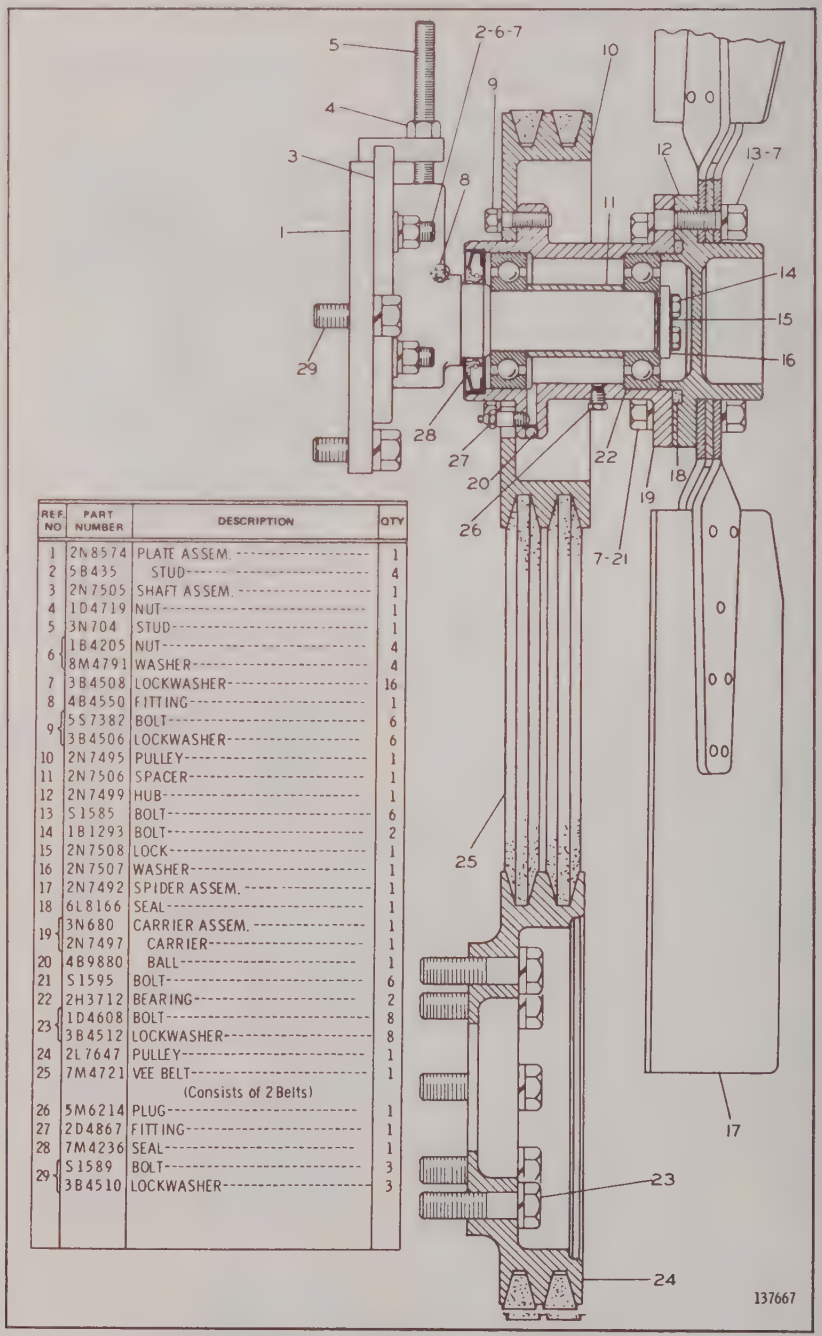


	REF NO	PART NUMBER	DESCRIPTION	QTY
	1	2N7494	PULLEY	1
	2	2N7506	SPACER	1
	3	2H3712	BEARING	2
	4	3N680	CARRIER ASSEM.	1
	5	7M4236	SEAL	1
C	6	5H7704	SEAL	1
	7	S1595	BOLT	12
	8	3B4508	LOCKWASHER	16
C	9	4B9883	BOLT	2
		2N7508	LOCK	1
	10	2N7507	WASHER	1
C	11	4N5283	HUB	1
	12	6H5536	SPIDER ASSEM.	1
	13	5M6214	PLUG	1
	14	1D4608	BOLT	8
		3B4512	LOCKWASHER	8
	15	2L7647	PULLEY	1
	16	8S1475	VEE BOLT SET (Consists of 2 Belts)	1
	17	2D4867	FITTING	1
	18	S1589	BOLT	3
		3B4510	LOCKWASHER	3
	19	2N8574	PLATE ASSEM.	1
C	20	1Y7945	STUD	4
		1B4205	NUT	4
		8M4791	WASHER	4
	21	4B4550	FITTING	1
	22	2N7505	SHAFT ASSEM.	1
	23	1D4719	NUT	1
	24	3N704	STUD	1
	25	5S7382	BOLT	6
		3B4506	LOCKWASHER	6
C	26	2N7504	SLEEVE	1

C INDICATES CHANGE

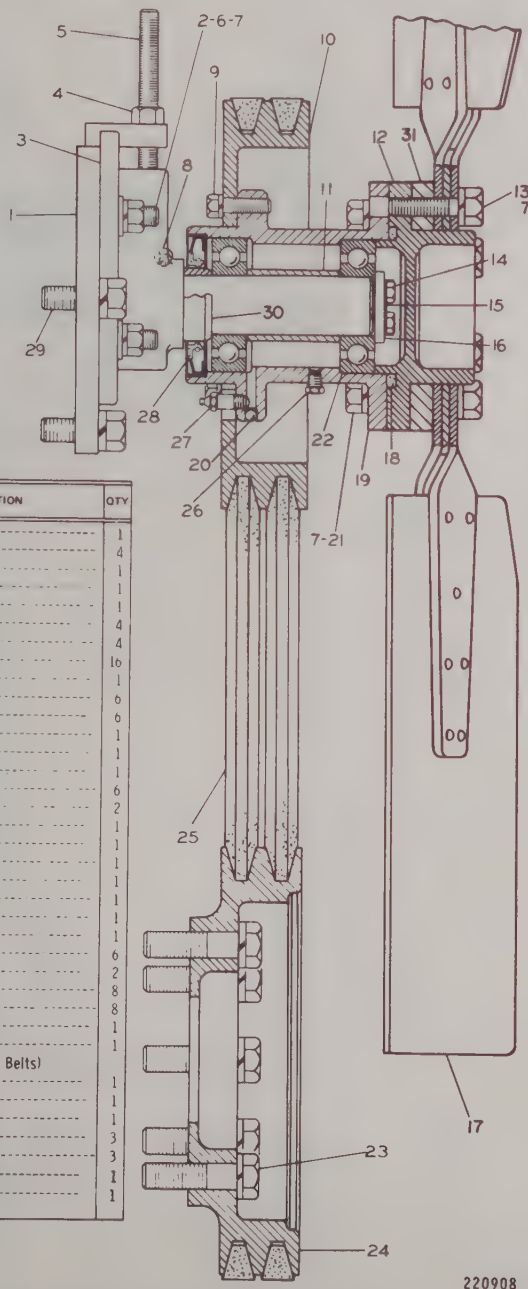
220909

2N7510 BLOWER FAN GROUP—33"—6 Blade
FOR USE WITH 7L7423 RADIATOR GROUP SHOWN ON PAGE 84A



REF. NO	PART NUMBER	DESCRIPTION	QTY
1	2N8574	PLATE ASSEM.	1
2	5B435	STUD	4
3	2N7505	SHAFT ASSEM.	1
4	1D4719	NUT	1
5	3N704	STUD	1
6	1B4205	NUT	4
	8M4791	WASHER	4
7	3B4508	LOCKWASHER	16
8	4B4550	FITTING	1
9	5S7382	BOLT	6
	3B4506	LOCKWASHER	6
10	2N7495	PULLEY	1
11	2N7506	SPACER	1
12	2N7499	HUB	1
13	S1585	BOLT	6
14	1B1293	BOLT	2
15	2N7508	LOCK	1
16	2N7507	WASHER	1
17	2N7492	SPIDER ASSEM.	1
18	6L8166	SEAL	1
19	3N680	CARRIER ASSEM.	1
	2N7497	CARRIER	1
20	4B9880	BALL	1
21	S1595	BOLT	6
22	2H3712	BEARING	2
23	1D4608	BOLT	8
	3B4512	LOCKWASHER	8
24	2L7647	PULLEY	1
25	7M4721	VEE BELT (Consists of 2 Belts)	1
26	5M6214	PLUG	1
27	2D4867	FITTING	1
28	7M4236	SEAL	1
29	S1589	BOLT	3
	3B4510	LOCKWASHER	3

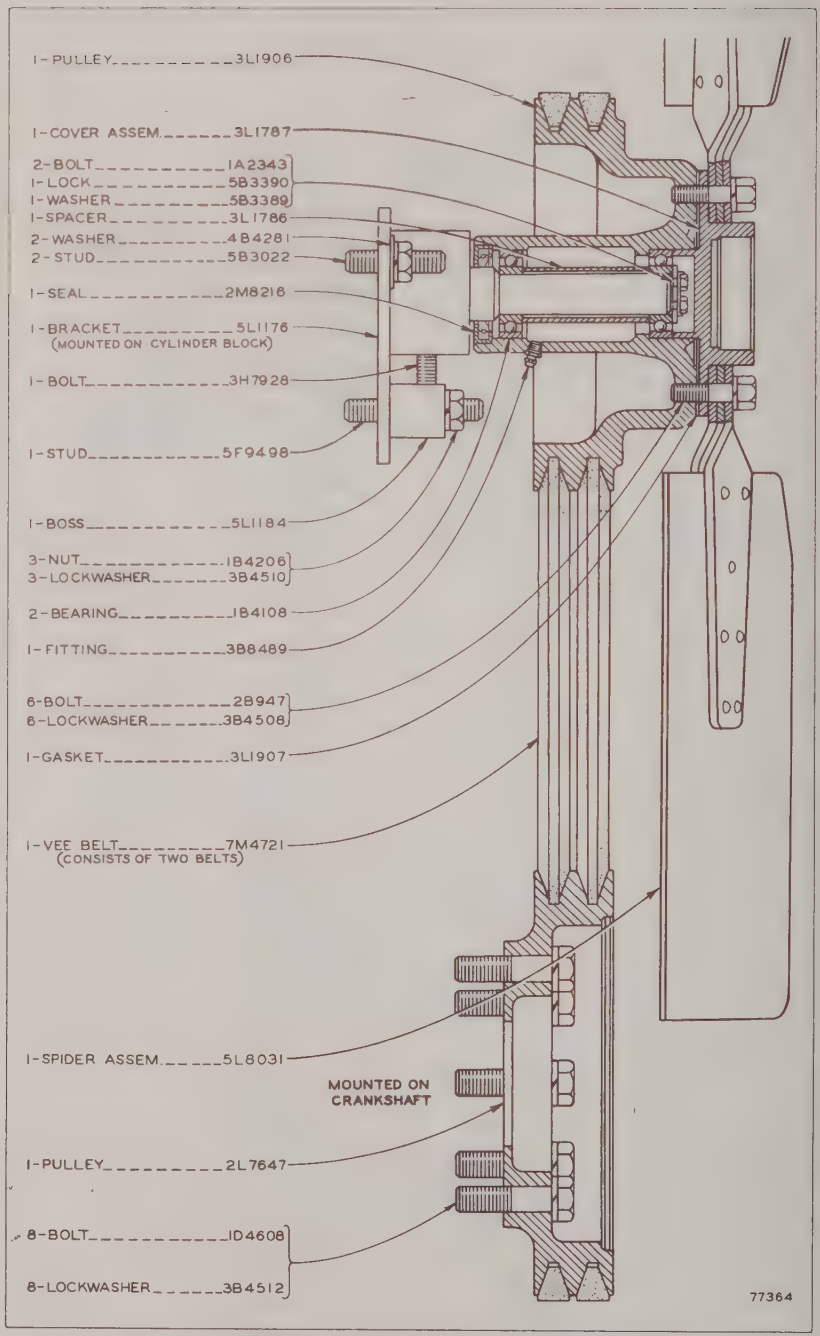
2N7509 BLOWER FAN GROUP—40"—8 Blade—Type 1
FOR USE WITH 1N5006 RADIATOR GROUP SHOWN ON PAGE 83A



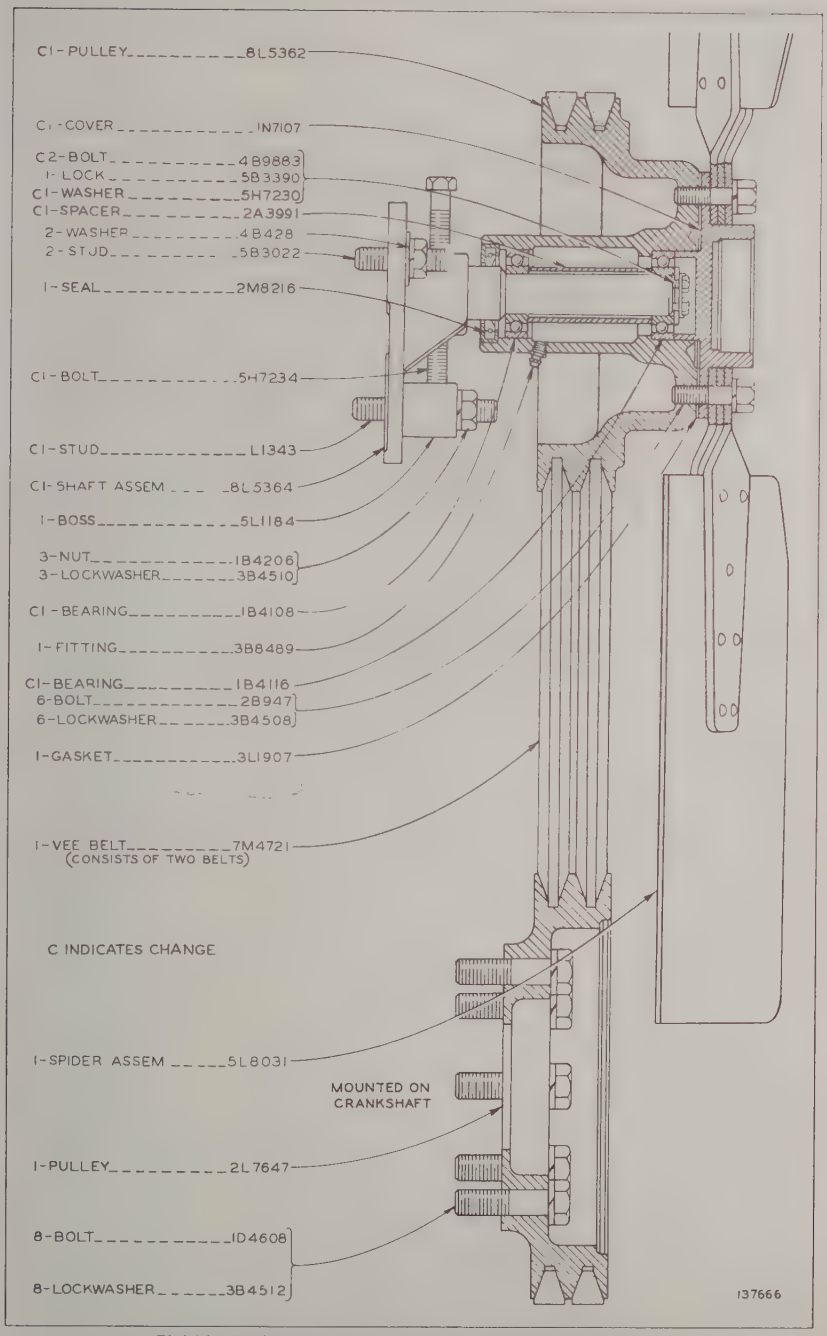
REF. NO.	PART NUMBER	DESCRIPTION	QTY
1	2N8574	PLATE ASSEM.	1
C 2	1Y7945	STUD	4
3	2N7505	SHAFT ASSEM.	1
4	1D4719	NUT	1
5	3N704	STUD	1
6	1B4205	NUT	4
	8M4791	WASHER	4
7	3B4508	LOCKWASHER	16
8	4B4550	FITTING	1
9	5S7382	BOLT	6
	3B4506	LOCKWASHER	6
10	2N7495	PULLEY	1
11	2N7506	SPACER	1
C 12	4N5283	HUB	1
C 13	2B947	BOLT	6
C 14	4B9883	BOLT	2
15	2N7508	LOCK	1
16	2N7507	WASHER	1
17	2N7492	SPIDER ASSEM.	1
C 18	5H7704	SEAL	1
19	3N680	CARRIER ASSEM.	1
	2N7497	CARRIER	1
20	4B9880	BALL	1
21	S1595	BOLT	6
22	2H3712	BEARING	2
23	1D4608	BOLT	8
	3B4512	LOCKWASHER	8
24	2L7647	PULLEY	1
25	7M4721	VEE BELT (Consists of 2 Belts)	1
26	5M6214	PLUG	1
27	2D4867	FITTING	1
28	7M4236	SEAL	1
29	S1589	BOLT	3
	3B4510	LOCKWASHER	3
C 30	2N7504	SLEEVE	1
C 31	4N5285	SPACER	1

C INDICATES CHANGE

2N7509 BLOWER FAN GROUP—40"—8 Blade—Type 2
FOR USE WITH 1N5006 RADIATOR GROUP SHOWN ON PAGE 83A



5L1180 BLOWER FAN GROUP—40"—8 Blade—Type 1
FOR USE WITH 5L1676 RADIATOR GROUP SHOWN ON PAGE 83



5L1180 BLOWER FAN GROUP—40"—8 Blade—Type 2
FOR USE WITH 5L1676 RADIATOR GROUP SHOWN ON PAGE 83

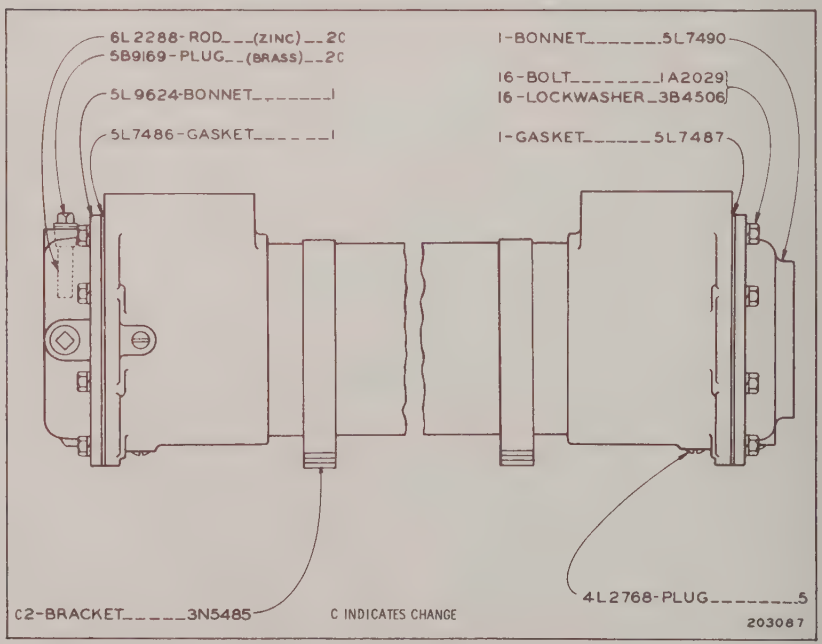
2	5N5739	Heater--120 Volt, 3 Kilowatts
		Consisting of:
1	5N8568	Thermostat
1	5N8566	Element Assembly
2	5N5740	Heater--240 Volts, 3 Kilowatts
		Consisting of:
1	5N8568	Thermostat
1	5N8567	Element Assembly

JACKET WATER HEATERS

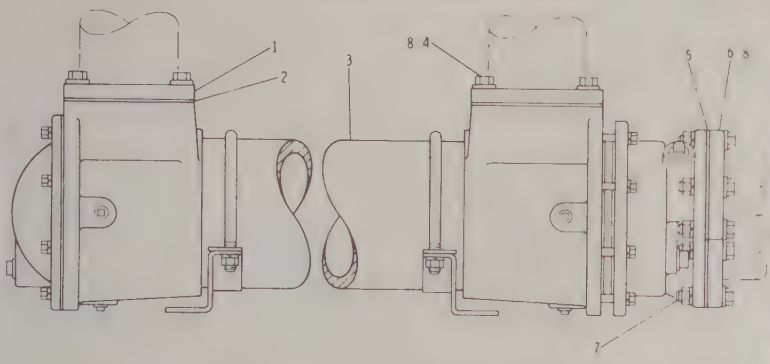
MAXIMUM HORSEPOWER EXCHANGER WILL COOL	WITH WATER COOLED MANIFOLD				WITH DRY MANIFOLD			
	RAW WATER	INDUSTRIAL WATER			RAW WATER	INDUSTRIAL WATER		
	85° F.	85° F.	100° F.	120° F.	85° F.	85° F.	100° F.	120° F.
300				5L6443				
350			5L6443					
380								5L6443
410	2R4840	5L6443		5L5975				
450	2R4840							
475							5L6443	
500			5L5975					5L5975
525					2R4840	5L6443		
550	5L6442	5L5975			2R4840			
575	5L6442						5L5975	
650					5L6442	5L5975		
675					5L6442			

75265

HEAT EXCHANGER CHART



5L5975 HEAT EXCHANGER ASSEMBLY
Refer to chart shown above for usage

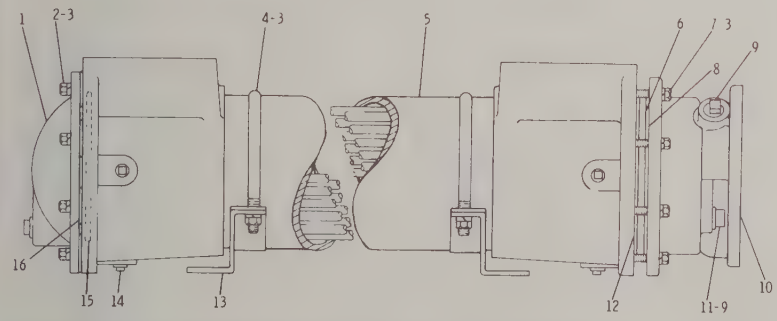


	REF. NO	PART NUMBER	DESCRIPTION	QTY
C	1	3N9479	FLANGE	2
C	2	4L3862	GASKET	2
	3	3N7992	HEAT EXCHANGER GROUP (Separate Illustration)	1
C	4	S1588	BOLT	8
	5	4F4873	GASKET	2

REF. NO	PART NUMBER	DESCRIPTION	QTY
6	3N1555	FLANGE	2
	S1591	BOLT	8
7	1D4717	NUT	8
	3B4506	LOCKWASHER	8
8	5M2894	WASHER	16

C INDICATES CHANGE 156732

3N8777 HEAT EXCHANGER GROUP—Sea Water

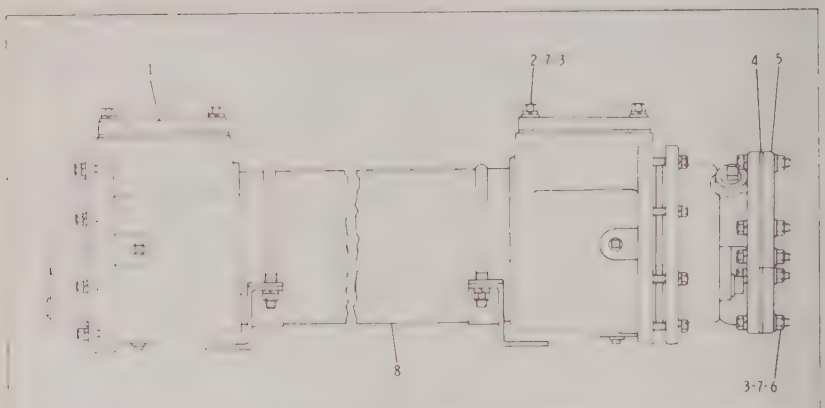


REF. NO	PART NUMBER	DESCRIPTION	QTY
1	8L4502	BONNET	1
2	9B7237	BOLT	8
3	3B4506	LOCKWASHER	20
4	3N9599	"U" BOLT	2
	1D4717	NUT	4
5	3N9635	SHELL ASSEM.	1
6	3N9638	CORE ASSEM.	1
7	5S7383	BOLT	8
8	8L4498	GASKET	1
9	5B9169	PLUG	5

REF. NO	PART NUMBER	DESCRIPTION	QTY
10	3N9607	BONNET	1
	1H1200	PIN	1
11	6L2280	ROD	2
12	8L4497	GASKET	1
13	3N9612	BRACKET ASSEM.	2
14	6L2282	PLUG	4
15	3N7351	SEAL	1
16	8L9767	SHIM	48

A428 T. FOUNTAIN

3N7992 HEAT EXCHANGER GROUP—Sea Water
Part of 3N8777 Heat Exchanger Group

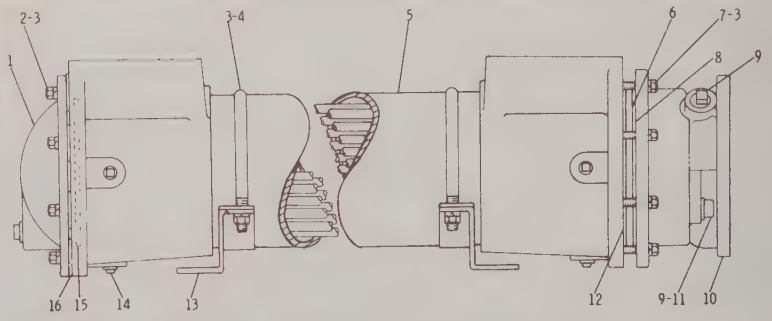


	REF. NO	PART NUMBER	DESCRIPTION	QTY
C	1	3N9479	FLANGE	2
C	1	4L3862	GASKET	2
C	2	S1588	BOLT	8
	3	5M2894	WASHER	16
	4	4F4873	GASKET	2
	5	3N1555	FLANGE	2
C	6	S1591	BOLT	8
	6	1D4717	NUT	8
C	7	3B4506	LOCKWASHER	8
C	8	3N7990	HEAT EXCHANGER GROUP (Separate Illustration)	1

C INDICATES CHANGE

210357

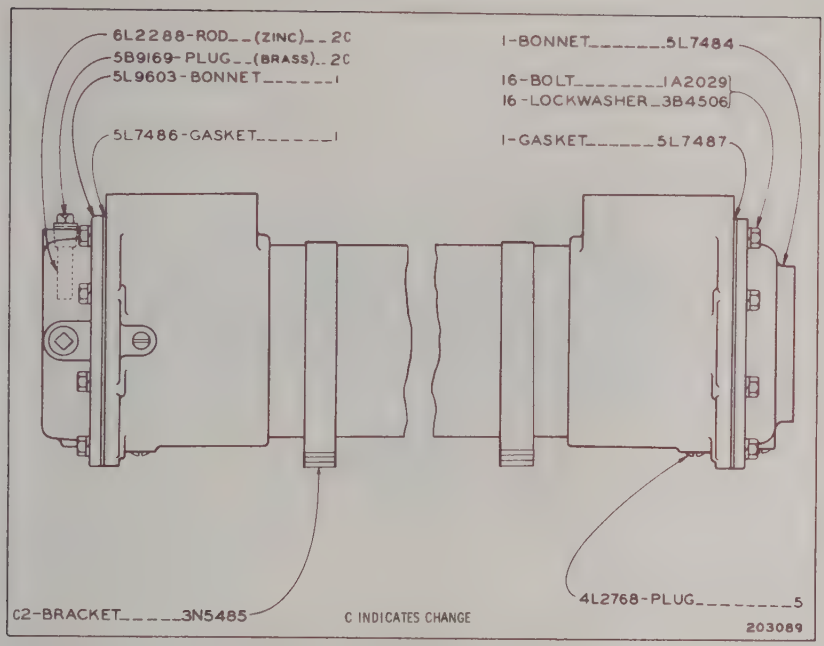
3N8775 HEAT EXCHANGER GROUP



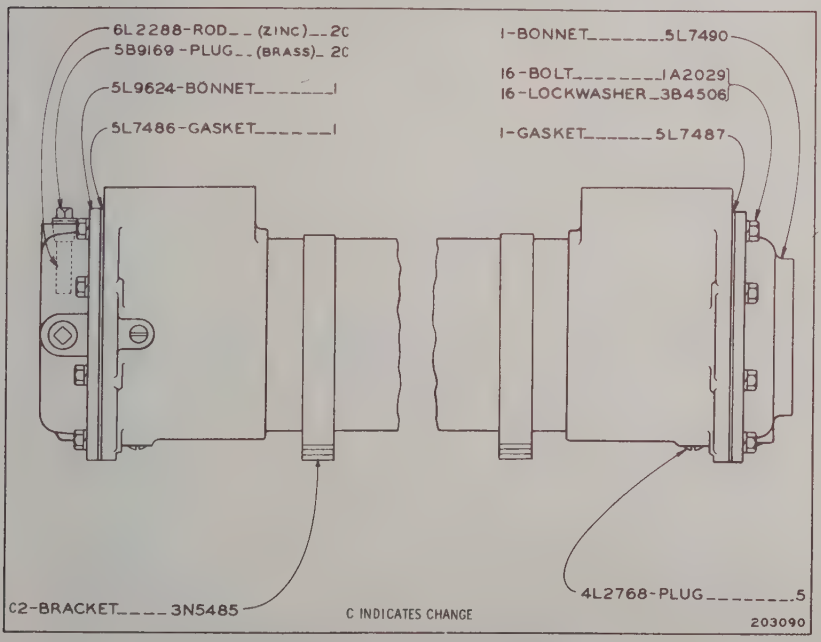
REF. NO	PART NUMBER	DESCRIPTION	QTY
1	8L4502	BONNET	1
2	9D7237	BOLT	8
3	3B4506	LOCKWASHER	20
4	3N9599	"U" BOLT	2
4	1D4717	NUT	4
5	3N9636	SHELL ASSEM.	1
6	8L5354	CORE ASSEM.	1
7	5S7383	BOLT	8
8	8L4498	GASKET	1
9	5B9169	PLUG	5
10	3N9607	BONNET	1
10	1H1200	PIN	1
11	6L2280	ROD	2
12	8L4497	GASKET	1
13	3N9612	BRACKET ASSEM.	1
14	6L2282	PLUG	4
15	3N7351	SEAL	1
16	8L9767	SHIM	48

A429 T. FOUNTAIN

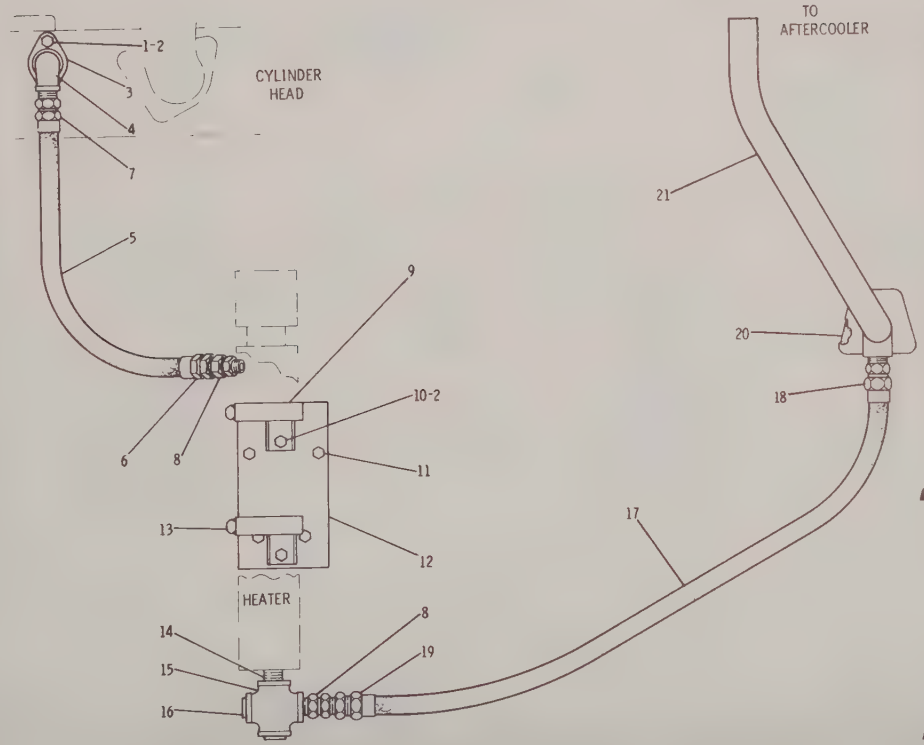
3N7990 HEAT EXCHANGER GROUP—Sea Water



5L6442 HEAT EXCHANGER ASSEMBLY
Refer to Page 90 for usage
Provides copper nickel tubing



5L6443 HEAT EXCHANGER ASSEMBLY
Refer to Page 90 for usage



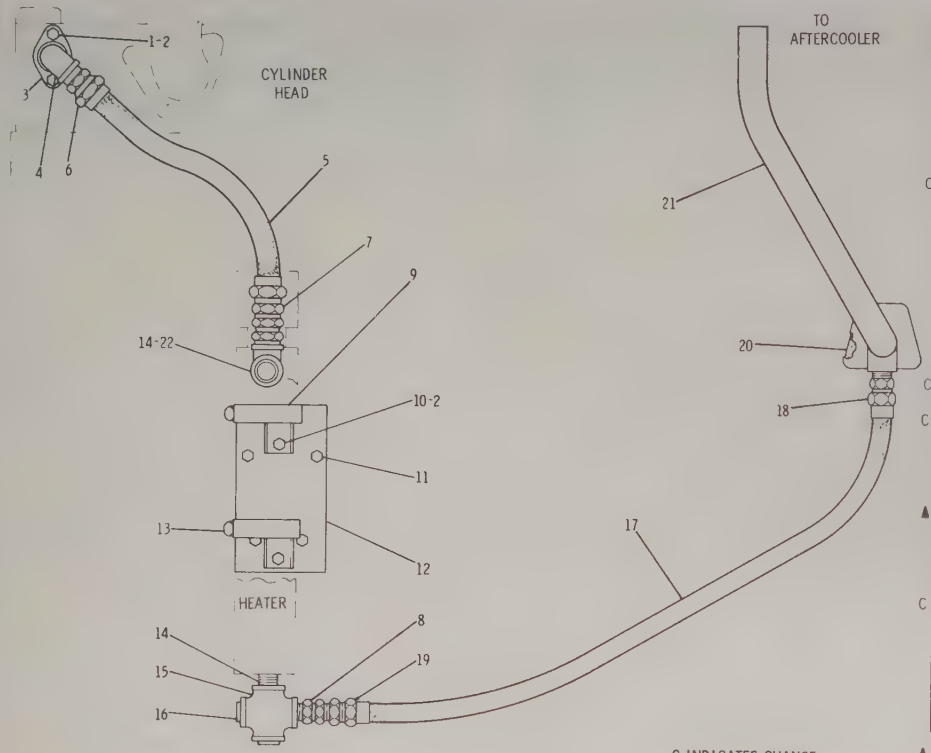
REF NO	PART NUMBER	DESCRIPTION	QTY
1	S1591	BOLT	2
2	3B4506	LOCKWASHER	10
3	2L5656	FLANGE	1
	2A3541	GASKET	1
4	7L8074	ELBOW	1
	3B7749	NIPPLE	1
5	3N9691	HOSE ASSEM. (Includes)	1
	5P1297	HOSE--------76.2 cm(30 in.)	
6	1L5903	FITTING	1
7	1L1480	FITTING	1
8	1L5987	UNION	2
9	5L7863	CLAMP ASSEM.	2
10	T102	BOLT	4
11	L1351	BOLT	4
12	3L9842	BRACKET ASSEM.	1
13	S1617	BOLT	2
	1D4717	NUT	2
	3B4505	LOCKWASHER	2
14	6B8128	NIPPLE	1
15	5P1907	CROSS	1
16	3B551	PLUG----(use as required)	2
17 ▲	3N9379	HOSE ASSEM. (Includes)	1
	5P1297	HOSE--------101.6 cm(40 in.)	
18	1L1480	FITTING	1
19	1L5903	FITTING	1
20	7H1662	GASKET	1
21	3N9566	TUBE ASSEM.	1

▲ ORDER BY THE CENTIMETRE

161140

3N9567 JACKET WATER HEATER MOUNTING GROUP—Type 1

3N9567 JACKET WATER HEATER MOUNTING GROUP—Type 2



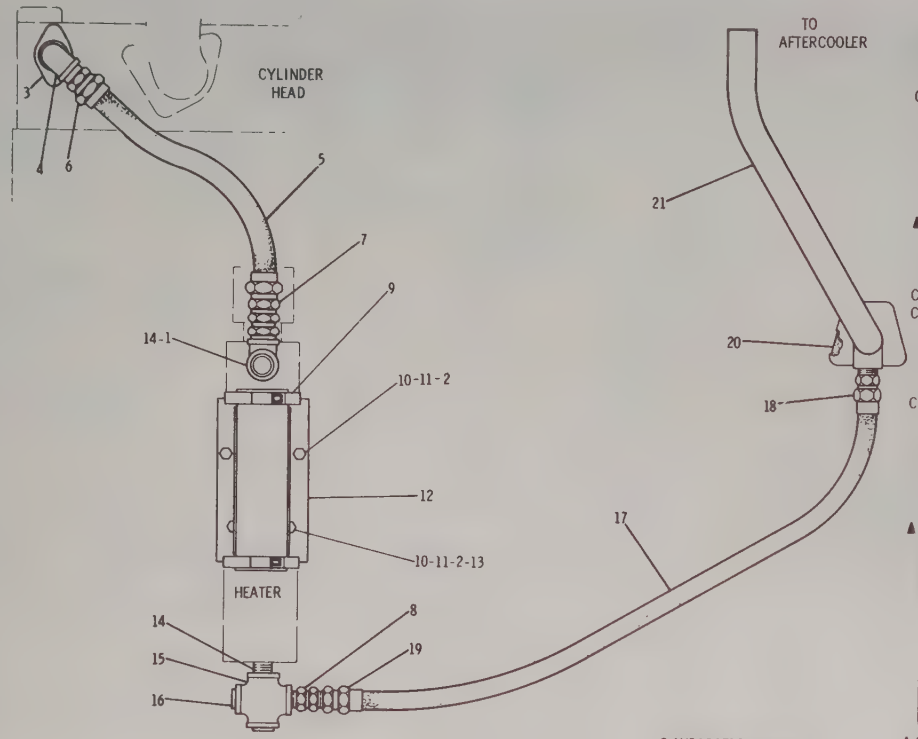
	REF NO	PART NUMBER	DESCRIPTION	QTY
	1	S1591	BOLT	2
	2	3B4506	LOCKWASHER	10
	3	2L5656	FLANGE	1
		2A3541	GASKET	1
	4	7L8074	ELBOW	1
		3B7749	NIPPLE	1
C		5N3340	HOSE ASSEM.	1
	5		(Includes)	
		5P1297	HOSE-------50.80 cm(20 in.)	
	6	1L5903	FITTING	1
	7	1L1480	FITTING	1
	8	1L5987	UNION	2
	9	5L7863	CLAMP ASSEM.	2
	10	T102	BOLT	4
	11	L1351	BOLT	4
	12	3L9842	BRACKET ASSEM.	1
		S1617	BOLT	2
C	13	1D4716	NUT	2
		3B4505	LOCKWASHER	2
C	14	6B8128	NIPPLE	2
	15	5P1907	CROSS	1
	16	3B551	PLUG----(use as required)	2
		3N9379	HOSE ASSEM.	1
	17		(Includes)	
▲		5P1297	HOSE--------101.6 cm(40 in.)	
	18	1L1480	FITTING	1
	19	1L5903	FITTING	1
	20	7H1662	GASKET	1
	21	3N9566	TUBE ASSEM.	1
C	22	3B6498	ELBOW	7

C INDICATES CHANGE

▲ ORDER BY THE CENTIMETRE

161141

3N9567 JACKET WATER HEATER MOUNTING GROUP—Type 3

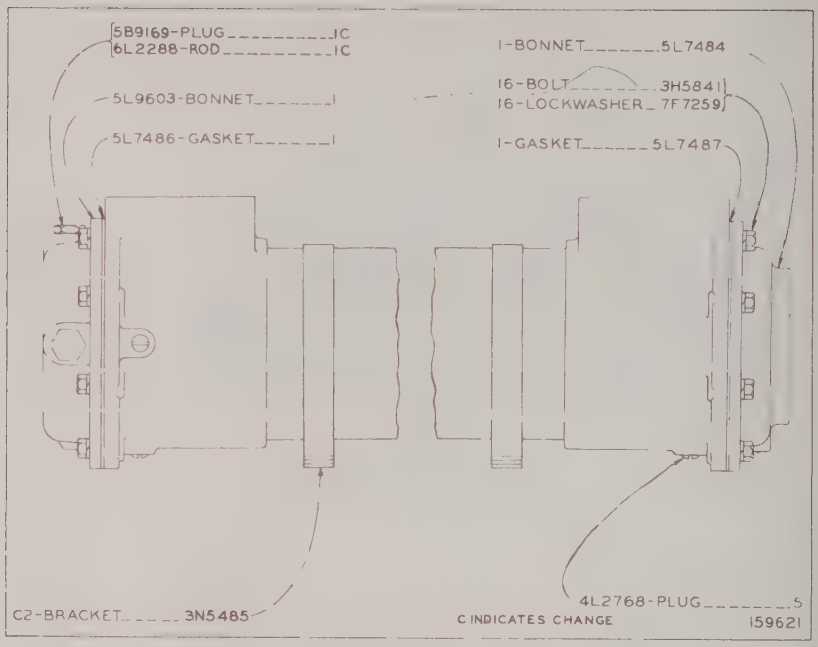


REF. NO.	PART NUMBER	DESCRIPTION	QTY
1	3B6498	ELBOW	1
C 2	3B4506	LOCKWASHER	4
3	2L5656	FLANGE	1
	2A3541	GASKET	1
4	7L8074	ELBOW	1
	3B7749	NIPPLE	1
5	5N3340	HOSE ASSEM. (Includes)	1
▲	5P1297	HOSE—50.80 cm(20 in.)	
6	1L5903	FITTING	1
7	1L1480	FITTING	1
8	1L5987	UNION	2
C 9	5P598	CLAMP	2
C 10	S1594	BOLT—2.54 cm(1.00 in.) long (For use with Primary Fuel Filter)	4
11	L1351	BOLT—2.22 cm(.875 in.) long (For use without Primary Fuel Filter)	4
12	3L9842	BRACKET ASSEM.	1
C 13	6B933	SPACER (For use with Primary Fuel Filter)	2
14	6B8128	NIPPLE	2
15	5P1907	CROSS	1
16	3B551	PLUG—(use as required)	2
17	3N9379	HOSE ASSEM. (Includes)	1
▲	5P1297	HOSE—101.6 cm(40 in.)	
18	1L1480	FITTING	1
19	1L5903	FITTING	1
20	7H1662	GASKET	1
21	3N9566	TUBE ASSEM.	1

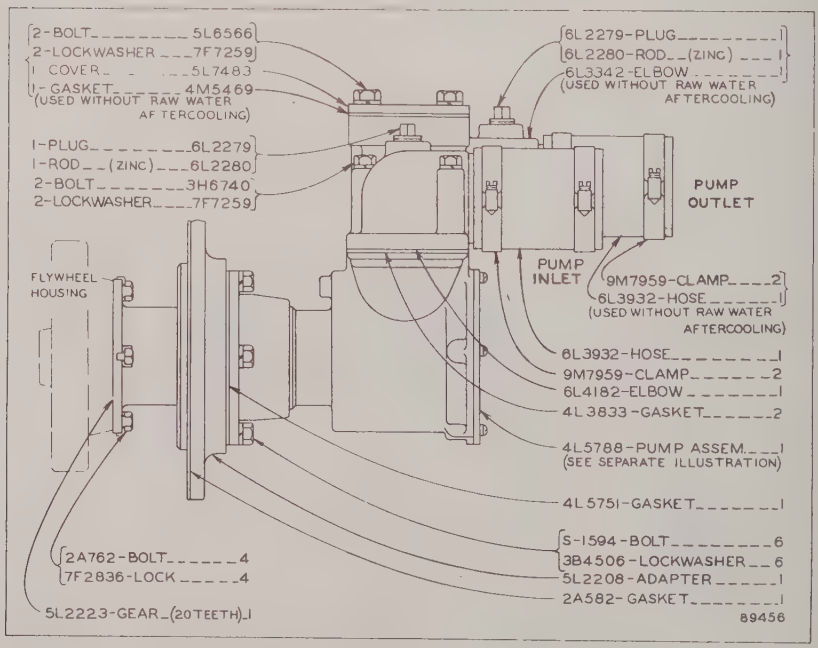
C INDICATES CHANGE

▲ ORDER BY THE CENTIMETRE

162224



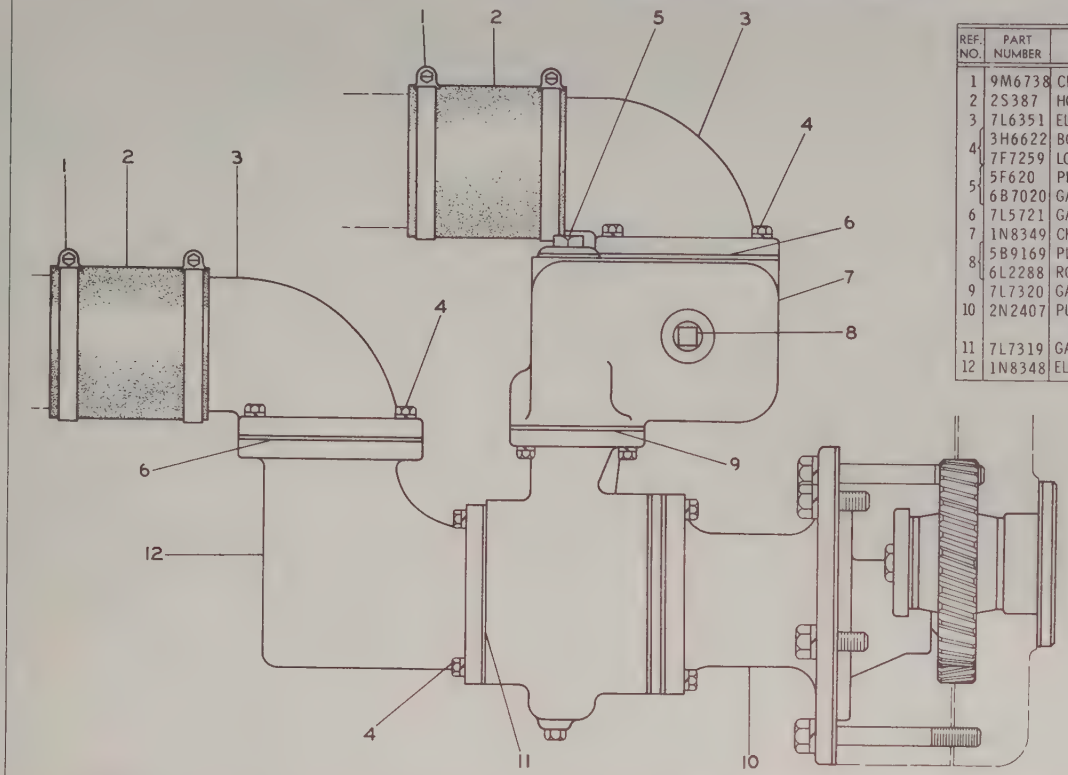
2R4840 HEAT EXCHANGER ASSEMBLY
Refer to Page 90 for usage
Provides copper nickel tubing



5L2237 AUXILIARY WATER PUMP GROUP
4L5788 Water Pump parts are shown on Page 94. Only separate parts serviced. When complete group is required order 2N2474

2N2474 RAW WATER PUMP GROUP

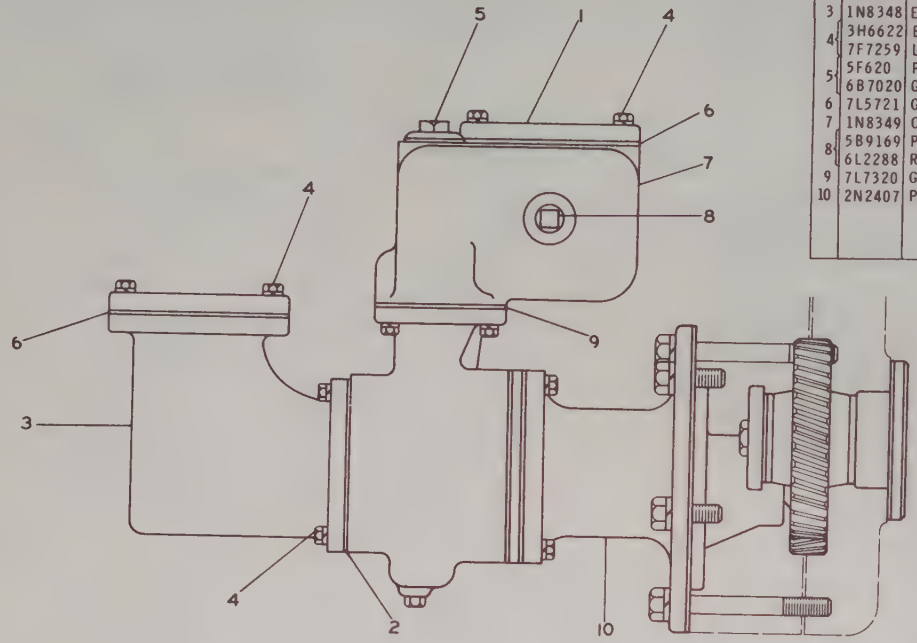
2N2407 Pump parts are shown on Page 92-4



REF. NO.	PART NUMBER	DESCRIPTION	QTY
1	9M6738	CLAMP	4
2	2S387	HOSE	2
3	7L6351	ELBOW	2
4	3H6622	BOLT	12
	7F7259	LOCKWASHER	12
5	5F620	PLUG	1
	6B7020	GASKET	1
6	7L5721	GASKET	2
7	1N8349	CHAMBER	1
8	5B9169	PLUG	1
	6L2288	ROD	1
9	7L7320	GASKET	1
10	2N2407	PUMP GROUP (See Separate Illustration)	1
11	7L7319	GASKET	1
12	1N8348	ELBOW	1

2N2474 RAW WATER PUMP GROUP–Type 2

2N2407 Pump parts are shown on Page 92-4

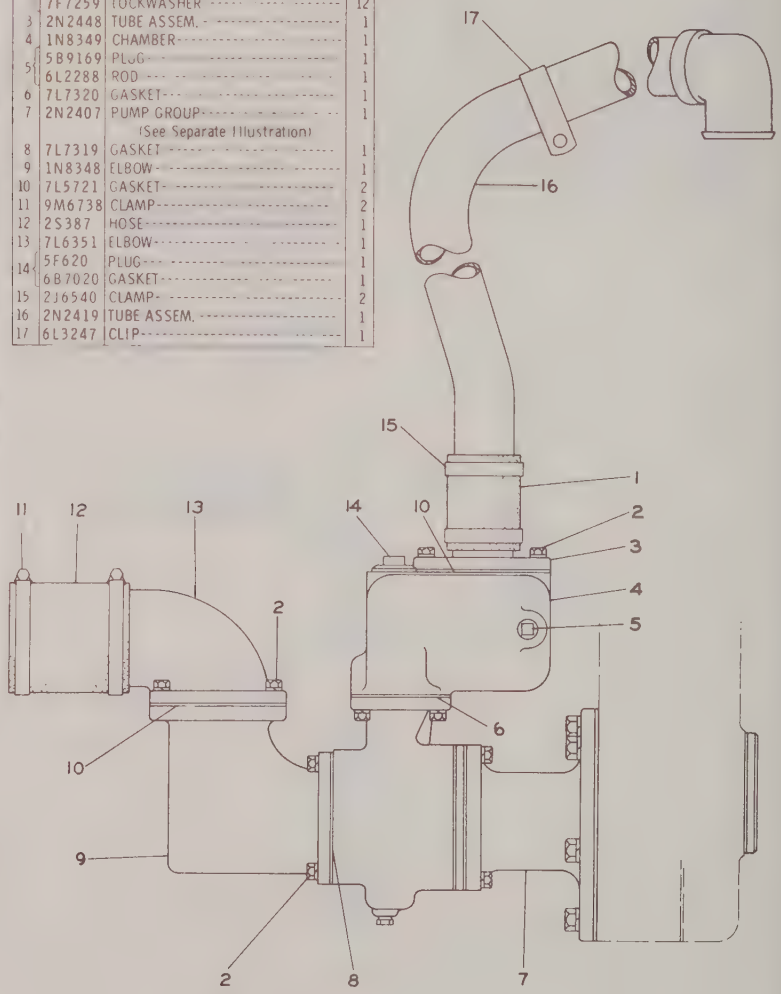


	REF. NO.	PART NUMBER	DESCRIPTION	QTY
C	1	2N8263	FLANGE	2
	2	7L7319	GASKET	1
	3	1N8348	ELBOW	1
	4	3H6622	BOLT	12
		7F7259	LOCKWASHER	12
	5	5F620	PLUG	1
		6B7020	GASKET	1
	6	7L5721	GASKET	2
	7	1N8349	CHAMBER	1
	8	5B9169	PLUG	1
		6L2288	ROD	1
	9	7L7320	GASKET	1
	10	2N2407	PUMP GROUP (Separate Illustration)	1

C INDICATES CHANGE

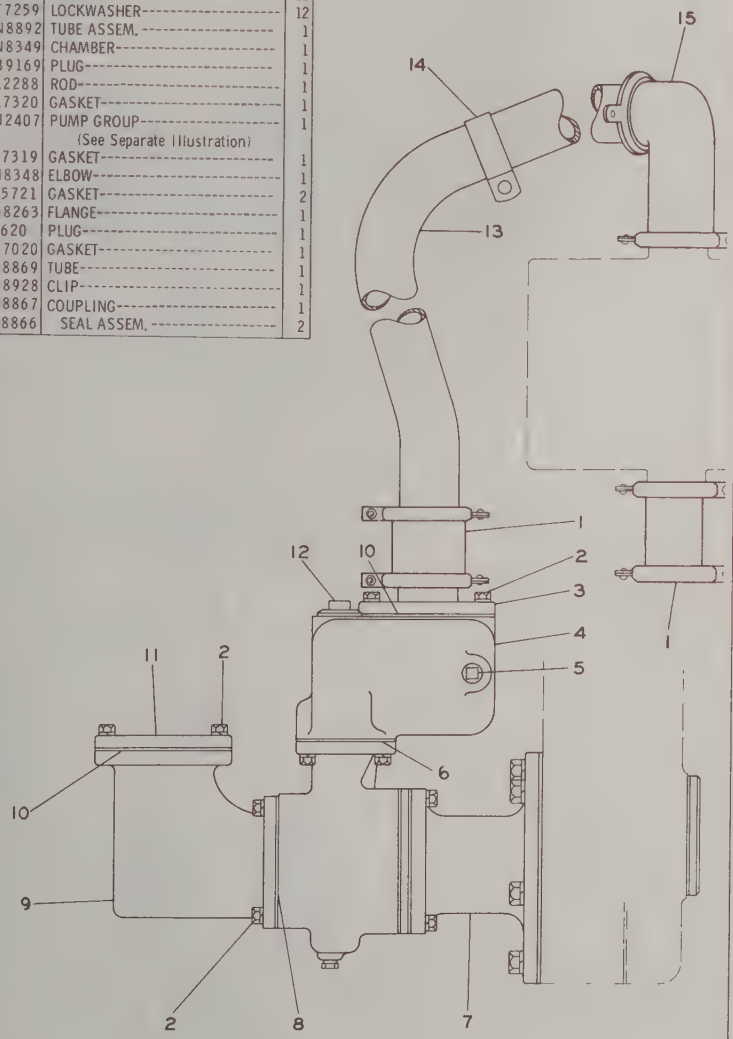
143838

REF NO.	PART NUMBER	DESCRIPTION	QTY
1	6L3393	HOSE	1
2	3H6622	BOLT	12
	7F7259	LOCKWASHER	12
3	2N2448	TUBE ASSEM.	1
4	1N8349	CHAMBER	1
5	5B9169	PLUG	1
	6L2288	ROD	1
6	7L7320	GASKET	1
7	2N2407	PUMP GROUP (See Separate Illustration)	1
8	7L7319	GASKET	1
9	1N8348	ELBOW	1
10	7L5721	GASKET	2
11	9M6738	CLAMP	2
12	2S387	HOSE	1
13	7L6351	ELBOW	1
14	5F620	PLUG	1
	6B7020	GASKET	1
15	2J6540	CLAMP	2
16	2N2419	TUBE ASSEM.	1
17	6L3247	CLIP	1

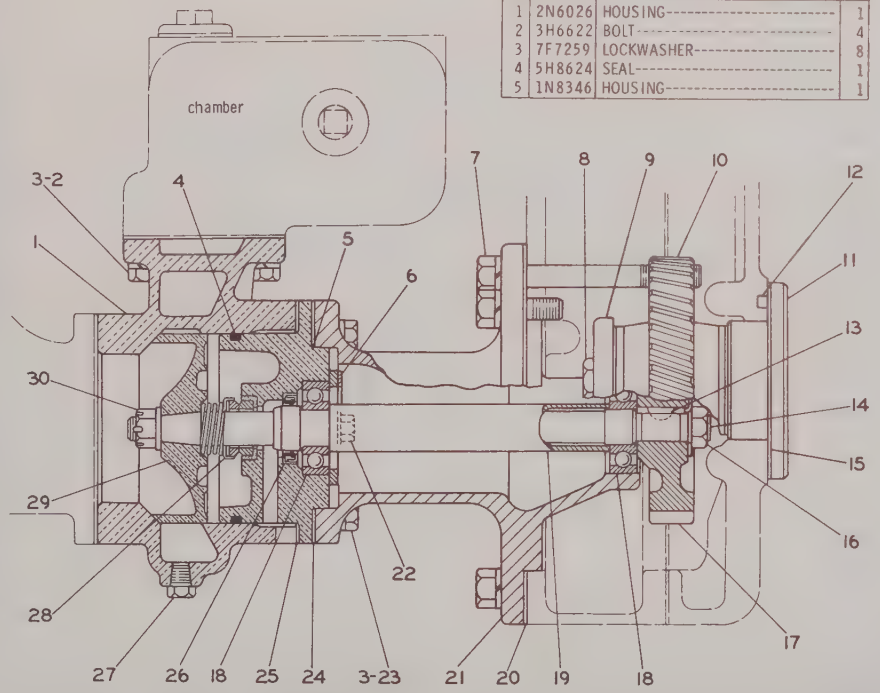


2N2506 SEA WATER PUMP AND LINES GROUP—Type 1
Effective with Serial No. 46B2898. FOR USE WITH SEA WATER AFTERCOOLER
2N2407 Pump parts are shown on Page 92-4

REF. NO.	PART NUMBER	DESCRIPTION	QTY
1	2N9061	COUPLING	2
	2N8866	SEAL ASSEM.	2
2	3H6622	BOLT	12
	7F7259	LOCKWASHER	12
3	2N8892	TUBE ASSEM.	1
4	1N8349	CHAMBER	1
5	5B9169	PLUG	1
	6L2288	ROD	1
6	7L7320	GASKET	1
7	2N2407	PUMP GROUP (See Separate Illustration)	1
8	7L7319	GASKET	1
9	1N8348	ELBOW	1
10	7L5721	GASKET	2
11	2N8263	FLANGE	1
12	5F620	PLUG	1
	6B7020	GASKET	1
13	2N8869	TUBE	1
14	2N8928	CLIP	1
15	2N8867	COUPLING	1
	2N8866	SEAL ASSEM.	2



2N2506 SEA WATER PUMP AND LINES GROUP—Type 2
Effective with Serial No. 46B2898. FOR USE WITH SEA WATER AFTERCOOLER
2N2407 Pump parts are shown on Page 92-4

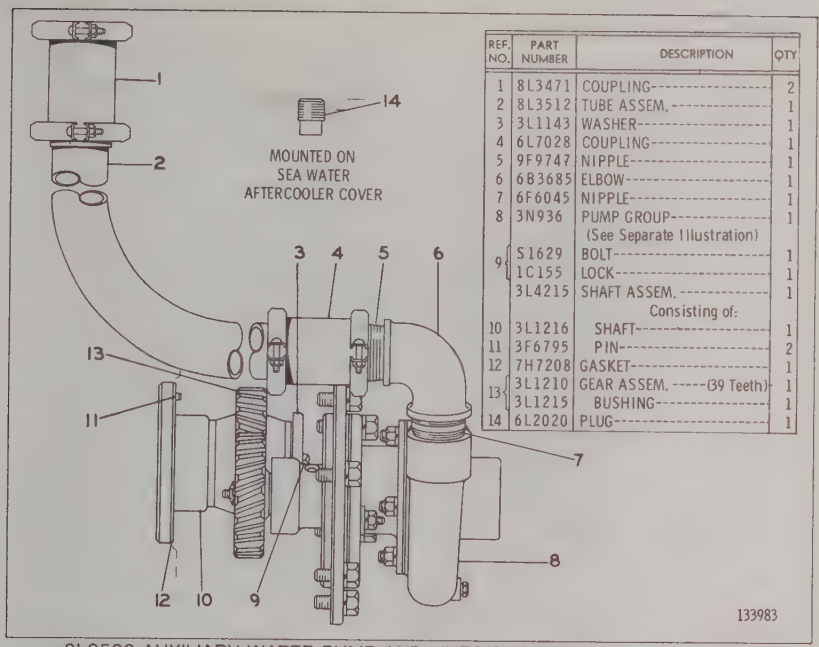


REF. NO.	PART NUMBER	DESCRIPTION	QTY
1	2N6026	HOUSING	1
2	3H6622	BOLT	4
3	7F7259	LOCKWASHER	8
4	5H8624	SEAL	1
5	1N8346	HOUSING	1

6	1N8342	RETAINER	1
	1N8343	LOCK	1
	S1585	BOLT----------(1.50" Long)- -----	2
7	8S9089	BOLT----------(4.50" Long)-----	4
	3B4508	LOCKWASHER	6
8	S1629	BOLT	1
	1C155	LOCK	1
9	3L1143	WASHER	1
10	3L1210	GEAR ASSEM. ------(39 Teeth)----	1
	3L1215	BUSHING	2
		(Part of 3L1210 Assem.)	
	3L4215	SHAFT ASSEM.	1
		Consisting of:	
11	3L1216	SHAFT	1
12	3F6795	PIN	2
13	1B8705	KEY	1
14	2N2405	SHAFT	1
15	7H7208	GASKET	1
16	9S1354	NUT	1
	1C152	LOCK	1
17	7L8764	GEAR--------(30 Teeth)---------	1
18	7H6967	BEARING	2
19	2N2404	SPACER	1
20	7H7091	GASKET	1
21	2N2406	ADAPTER	1
22	2B2695	BOLT	2
23	1L8038	BOLT	4
24	7L7322	GASKET	1
25	1N8341	GASKET	1
26	9M7432	SEAL	1
27	5B7890	PLUG	1
28	7L5663	SEAL	1
29	7L5526	IMPELLER	1
30	4M2347	NUT	1
	4M2348	COTTER PIN	1
	7F560	WASHER	1

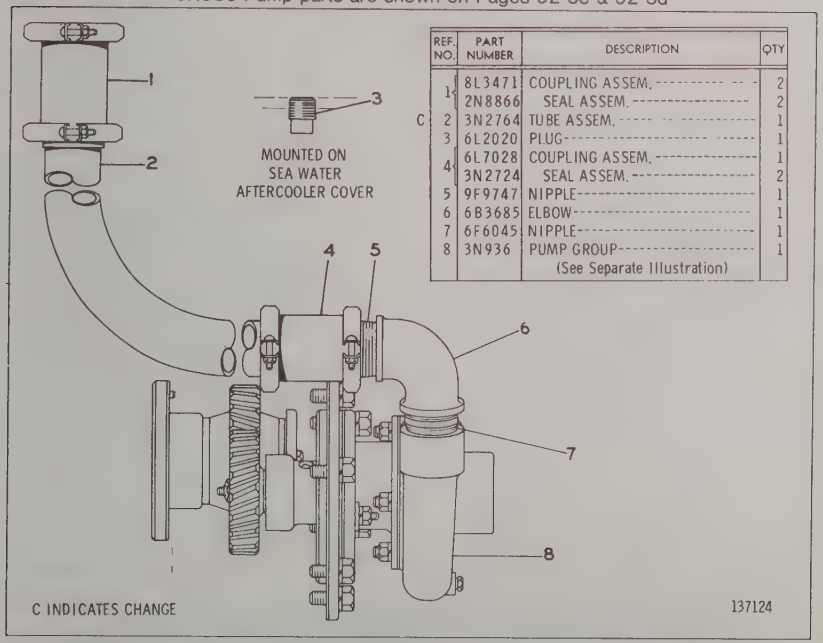
130655

2N2407 SEA WATER PUMP GROUP
Part of 2N2474 Raw Water Pump Group & 2N2506 Sea Water Pump & Lines Group shown on Pages 92-1 through 92-3



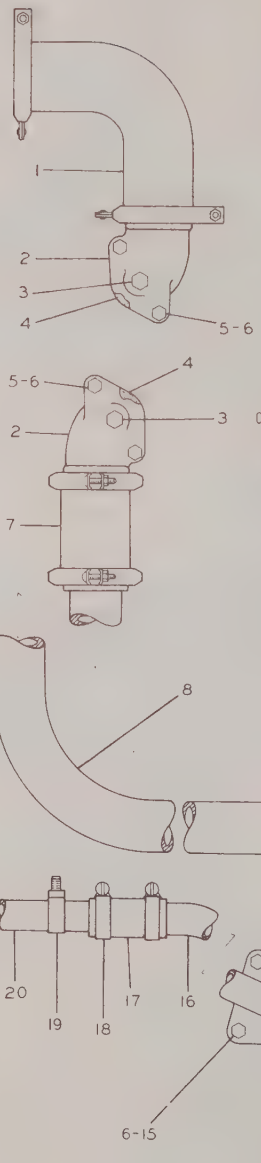
REF. NO.	PART NUMBER	DESCRIPTION	QTY
1	8L3471	COUPLING	2
2	8L3512	TUBE ASSEM.	1
3	3L1143	WASHER	1
4	6L7028	COUPLING	1
5	9F9747	NIPPLE	1
6	6B3685	ELBOW	1
7	6F6045	NIPPLE	1
8	3N936	PUMP GROUP (See Separate Illustration)	1
9	S1629	BOLT	1
	1C155	LOCK	1
	3L4215	SHAFT ASSEM. Consisting of:	1
10	3L1216	SHAFT	1
11	3F6795	PIN	2
12	7H7208	GASKET	1
13	3L1210	GEAR ASSEM. (39 Teeth)	1
	3L1215	BUSHING	1
14	6L2020	PLUG	1

8L3520 AUXILIARY WATER PUMP AND LINES GROUP—Fresh Water—Type 1
Serial No. 46B2898 to 46B4264 inclusive
FOR USE WITH 2N8443 SEA WATER AFTERCOOLER GROUP SHOWN ON PAGE 92A
3N936 Pump parts are shown on Pages 92-5c & 92-5d



REF. NO.	PART NUMBER	DESCRIPTION	QTY
1	8L3471	COUPLING ASSEM.	2
	2N8866	SEAL ASSEM.	2
C 2	3N2764	TUBE ASSEM.	1
3	6L2020	PLUG	1
4	6L7028	COUPLING ASSEM.	1
	3N2724	SEAL ASSEM.	2
5	9F9747	NIPPLE	1
6	6B3685	ELBOW	1
7	6F6045	NIPPLE	1
8	3N936	PUMP GROUP (See Separate Illustration)	1

8L3520 AUXILIARY WATER PUMP AND LINES GROUP—Fresh Water—Type 2
Serial No. 46B2898 to 46B4264 inclusive
FOR USE WITH 2N8443 SEA WATER AFTERCOOLER GROUP SHOWN ON PAGE 92A
3N936 Pump parts are shown on Pages 92-5c & 92-5d

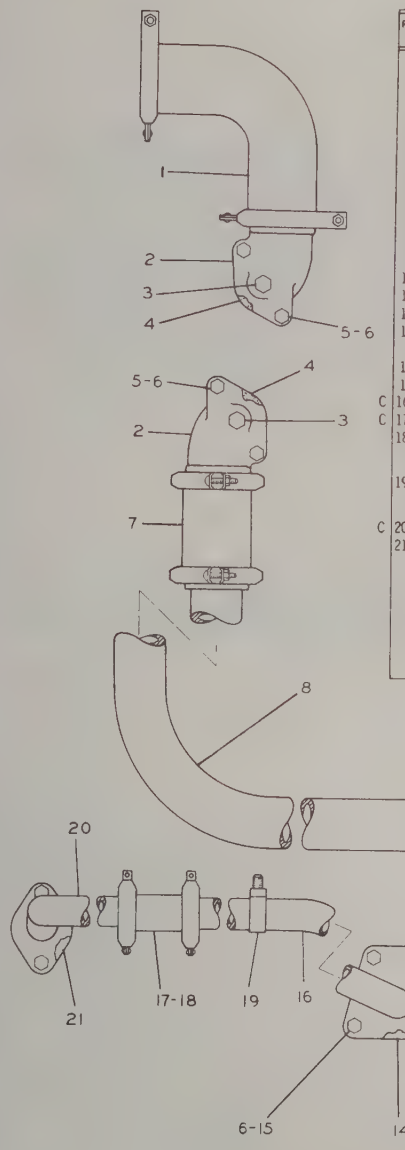


REF. NO	PART NUMBER	DESCRIPTION	QTY
C	1	3N1371 COUPLING ASSEM.	1
		2N8866 SEAL ASSEM.	2
C	2	3N2926 ELBOW	2
C	3	5M6213 PLUG	2
C	4	3N2945 GASKET	2
C	5	L2070 BOLT	4
C	6	3B4506 LOCKWASHER	8
	7	8L3471 COUPLING ASSEM.	1
		2N8866 SEAL ASSEM.	2
	8	3N2764 TUBE ASSEM.	1
	9	6L7028 COUPLING ASSEM.	1
		3N2724 SEAL ASSEM.	2
C	10	6F8860 NIPPLE	1
	11	6B3685 ELBOW	1
	12	6F6045 NIPPLE	1
	13	3N936 PUMP GROUP (Separate Illustration)	1
C	14	7H1662 GASKET	1
C	15	S1594 BOLT	4
C	16	5L7849 TUBE ASSEM.	1
C▲	17	2S6647 HOSE	3"
C	18	9M2904 CLAMP	2
C	19	8B4592 CLIP	1
C		S1618 BOLT	1
C		3B4505 LOCKWASHER	1
C		2L9056 SPACER	1
C	20	5L7850 TUBE ASSEM.	1
C	21	5H2831 GASKET	1

▲ ORDER BY THE INCH
C INDICATES CHANGE

140450

8L3520 AUXILIARY WATER PUMP AND LINES GROUP—Type 1
Serial No. 46B4265—Up
3N936 Pump parts are shown on Pages 92-5c & 92-5d

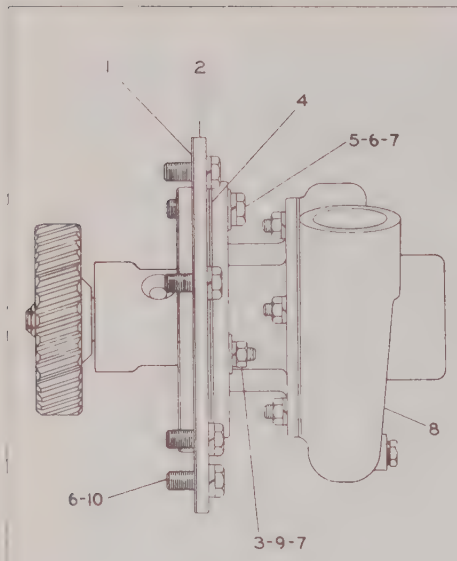


REF. NO.	PART NUMBER	DESCRIPTION	QTY
1	3N1371	COUPLING ASSEM.	1
	2N8866	SEAL ASSEM.	2
2	3N2926	ELBOW	2
3	5M6213	PLUG	2
4	3N2945	GASKET	2
5	L2070	BOLT	4
6	3B4506	LOCKWASHER	8
7	8L3471	COUPLING ASSEM.	1
	2N8866	SEAL ASSEM.	2
8	3N2764	TUBE ASSEM.	1
9	6L7028	COUPLING ASSEM.	1
	3N2724	SEAL ASSEM.	2
10	6F8860	NIPPLE	1
11	6B3685	ELBOW	1
12	6F6045	NIPPLE	1
13	3N936	PUMP GROUP (Separate Illustration)	1
14	7H1662	GASKET	1
15	S1594	BOLT	4
C 16	3N3998	TUBE ASSEM.	1
C 17	4S407	JOINT ASSEM.	1
18	7K7973	SEAL	2
19	8B4592	CLIP	1
	S1618	BOLT	1
	3B4505	LOCKWASHER	1
	2L9056	SPACER	1
C 20	3N9996	TUBE ASSEM.	1
21	5H2831	GASKET	1

C INDICATES CHANGE

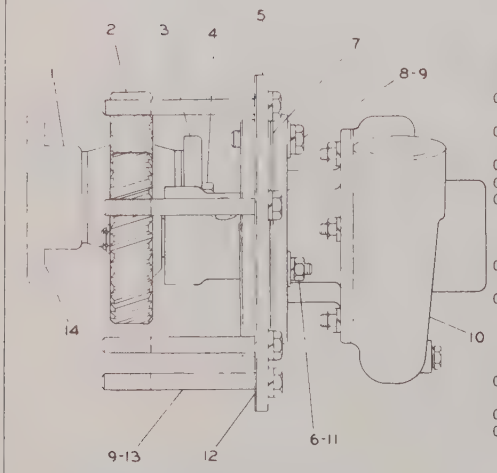
143544

8L3520 AUXILIARY WATER PUMP AND LINES GROUP—Type 2
Serial No. 46B4265—Up
3N936 Pump parts are shown on Pages 92-5c & 92-5d



REF. NO	PART NUMBER	DESCRIPTION	QTY
1	7H7091	GASKET	1
2	8L3519	ADAPTER ASSEM.	1
3	9L1321	STUD	1
4	3L7229	GASKET	1
5	T772	BOLT	2
6	3B4507	LOCKWASHER	6
7	9M8283	WASHER	3
8	2N9047	PUMP ASSEM. (See Separate Illustration)	1
9	1D4717	NUT	1
	3B4506	LOCKWASHER	1
10	4F8965	BOLT	4

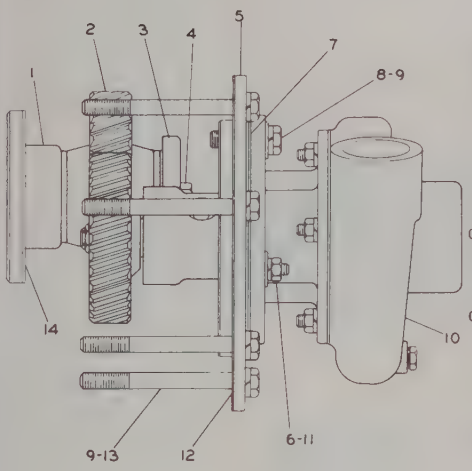
3N936 AUXILIARY PUMP GROUP—Fresh Water—Type 1
Part of 8L3520 Auxiliary Water Pump and Lines Groups shown on Pages 92-5, 92-5a & 92-5b. 2N9047 Pump parts are shown on Page 92-6



	REF. NO.	PART NUMBER	DESCRIPTION	QTY
C	11	3L4215	SHAFT ASSEM.	1
		3F6795	PIN	2
C	2	3L1210	GEAR ASSEM. (39 Teeth)	1
		3L1215	BUSHING	2
C	3	3L1143	WASHER	1
C	4	S1629	BOLT	1
C		1C155	LOCK	1
	5	8L3519	ADAPTER ASSEM.	1
	6	9L1321	STUD	1
	7	3L7229	GASKET	1
C	8	S1587	BOLT	2
		4B4280	WASHER	2
C	9	3B4508	LOCKWASHER	6
	10	2N9047	PUMP ASSEM. (Separate Illustration)	1
		1D4717	NUT	1
	11	3B4506	LOCKWASHER	1
C		9M8283	WASHER	1
	12	7H7091	GASKET	1
C	13	1D4569	BOLT	4
C	14	7H7208	GASKET	1

C INDICATES CHANGE

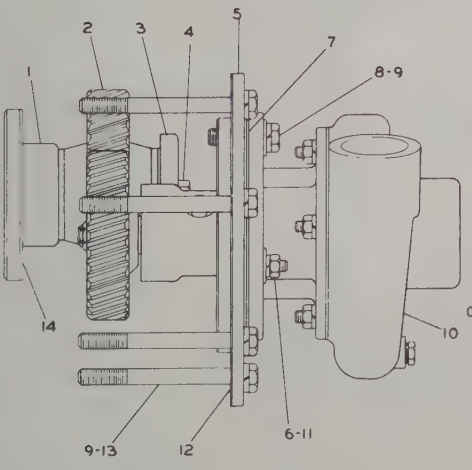
3N936 AUXILIARY PUMP GROUP—Fresh Water—Type 2
Part of 8L3520 Auxiliary Water Pump and Lines Groups shown on Pages 92-5, 92-5a & 92-5b. 2N9047 Pump parts are shown on Page 92-6



REF. NO.	PART NUMBER	DESCRIPTION	QTY
1	3L4215	SHAFT ASSEM.	1
	3F6795	PIN	2
2	3L1210	GEAR ASSEM. (39 Teeth)	1
	3L1215	BUSHING	2
3	3L1143	WASHER	1
4	S1629	BOLT	1
	1C155	LOCK	1
5	8L3519	ADAPTER ASSEM.	1
6	8M1047	STUD	1
7	3L7229	GASKET	1
8	S1587	BOLT	2
	4B4280	WASHER	2
9	3B4508	LOCKWASHER	6
10	3N6937	PUMP ASSEM. (Separate Illustration)	1
11	1D4717	NUT	1
	3B4506	LOCKWASHER	1
	9M8283	WASHER	1
12	7H7091	GASKET	1
13	1D4569	BOLT	4
14	7H7208	GASKET	1

C INDICATES CHANGE 144788

3N936 AUXILIARY PUMP GROUP—Fresh Water—Type 3
Part of 8L3520 Auxiliary Water Pump & Lines Group shown on Pages 92-5, 92-5a & 92-5b
3N6937 Pump parts are shown on Page 92-6a

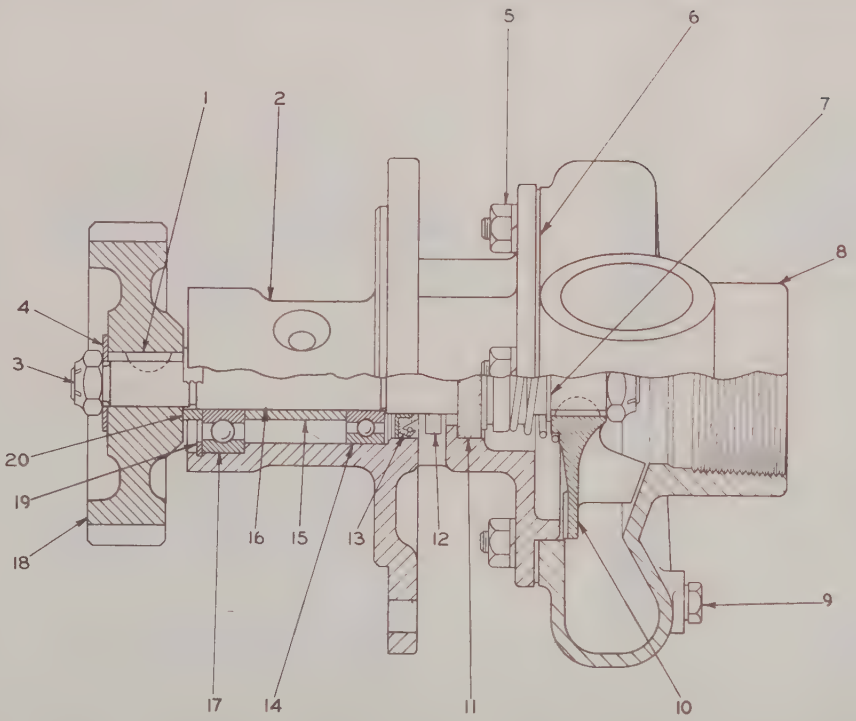


REF. NO.	PART NUMBER	DESCRIPTION	QTY
1	3L4215	SHAFT ASSEM.	1
	3F6795	PIN	2
2	3L1210	GEAR ASSEM. (39 Teeth)	1
	3L1215	BUSHING	2
3	3L1143	WASHER	1
4	S1629	BOLT	1
	1C155	LOCK	1
5	8L3519	ADAPTER ASSEM.	1
6	8M1047	STUD	1
7	3L7229	GASKET	1
8	S1587	BOLT	2
	4B4280	WASHER	2
9	3B4508	LOCKWASHER	6
10	5N3720	PUMP ASSEM. (Separate Illustration)	1
11	1D4717	NUT	1
	3B4506	LOCKWASHER	1
	9M8283	WASHER	1
12	7H7091	GASKET	1
13	1D4569	BOLT	4
14	7H7208	GASKET	1

C INDICATES CHANGE

213012

3N936 AUXILIARY PUMP GROUP—Fresh Water—Type 4
Part of 8L3520 Auxiliary Water Pump & Lines Group shown on Pages 92-5, 92-5a & 92-5b. 5N3720 Pump parts are shown on Page 92-6b



	REF NO	PART NUMBER	DESCRIPTION	QTY
▲	1	2N3960	KEY	2
	2	2N9048	BODY	1
▲	3	2N3958	NUT	2
▲	4	4B4280	WASHER	1
	5	4L6498	NUT	6
		3L6789	LOCKWASHER	6
	6	2N3955	GASKET	1
▲	7	2N3957	SHIM	1
	8	2N3959	HOUSING	1
▲	9	5M6214	PLUG	1
▲	10	2N3956	IMPELLER	1
	11	2N3954	SEAL ASSEM.	1
▲	12	2N3952	SLINGER	1
	13	3J4407	SEAL	1
▲	14	6B924	BEARING	1
▲	15	2N3951	SPACER	1
	16	2N3947	SHAFT	1
▲	17	2N3950	BEARING	1
	18	7L8764	GEAR	1
	19	2N3949	RING	1
▲	20	2N3948	SPACER	1

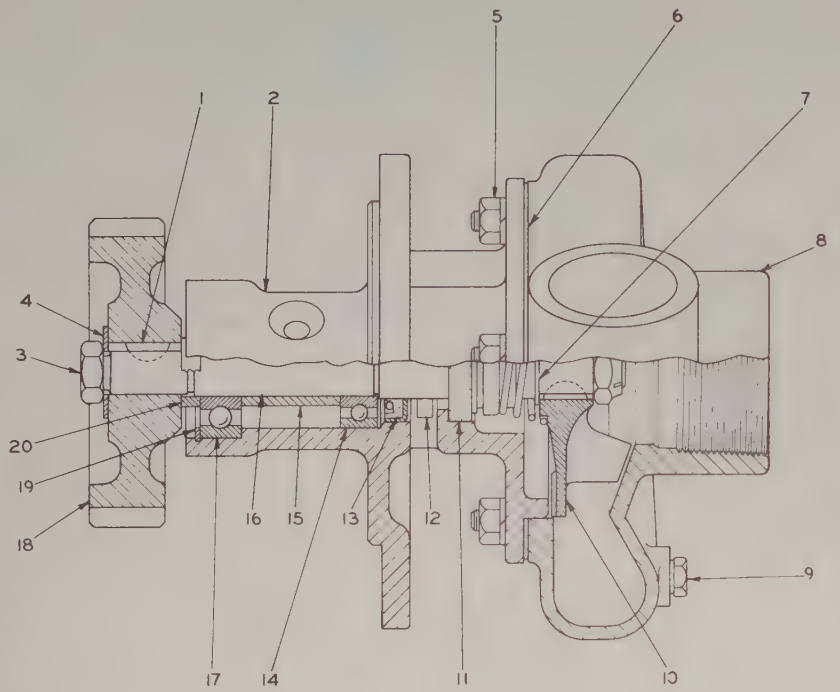
1P9060 WATER PUMP REBUILD KIT IS AVAILABLE
(Consists of Parts Marked ▲)

133985

2N9047 AUXILIARY WATER PUMP ASSEMBLY
Part of 3N936 Auxiliary Pump Group shown on Page 92-5c

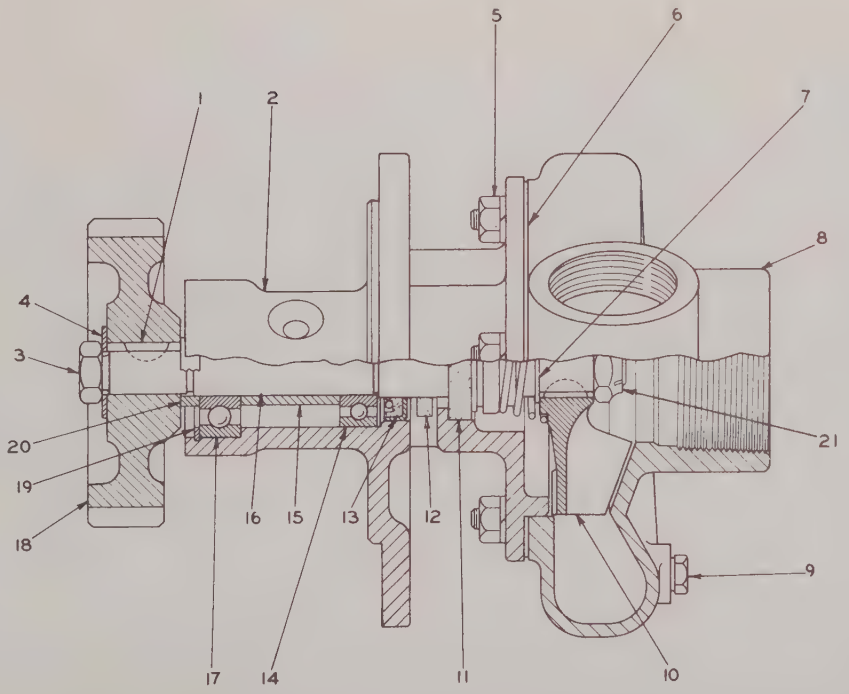
3N6937 AUXILIARY WATER PUMP ASSEMBLY

Part of 3N936 Pump Group shown on Page 92-5d



REF. NO.	PART NUMBER	DESCRIPTION	QTY
1	2N3960	KEY	2
2	2N9048	BODY	1
3	9S1354	NUT	2
4	1C152	WASHER	1
5	4L6498	NUT	6
	3L6789	LOCKWASHER	6
6	2N3955	GASKET	1
7	2N3957	SHIM	1
8	2N3959	HOUSING ASSEM.	1
9	5M6214	PLUG	1
10	2N3956	IMPELLER	1
11	3N2800	SEAL ASSEM.	1
12	2N3952	SLINGER	1
13	8H9520	SEAL	1
14	6B924	BEARING	1
15	2N3951	SPACER	1
16	3N6936	SHAFT	1
17	2N3950	BEARING	1
18	7L8764	GEAR	1
19	2N3949	RING	1
20	2N3948	SPACER	1

144790

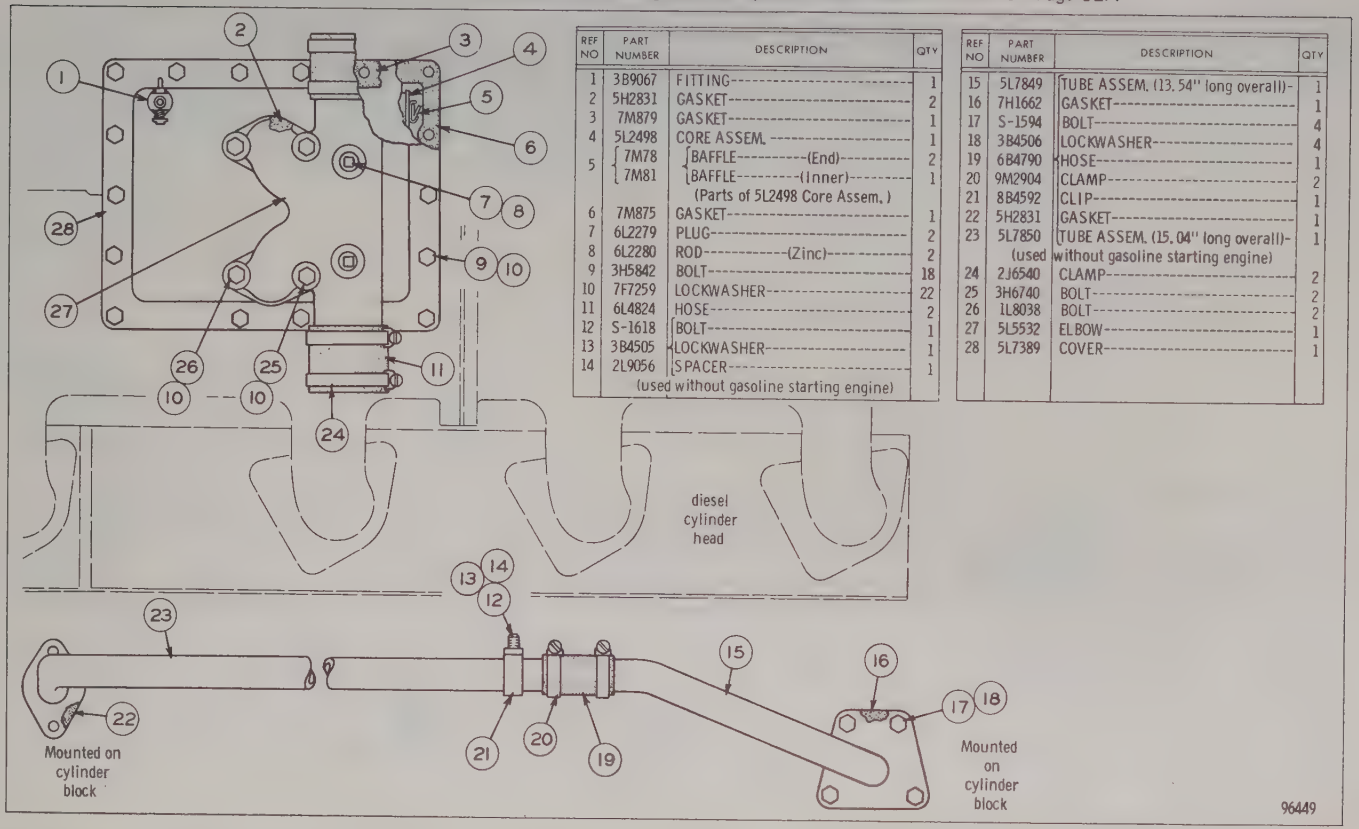


REF. NO	PART NUMBER	DESCRIPTION	QTY
1	2N3960	KEY	2
2	2N9048	BODY	1
3	9S1354	NUT	1
4	1C152	LOCK	1
5	4L6498	NUT	6
	3L6789	LOCKWASHER	6
6	2N3955	GASKET	1
7	2N3957	SHIM	1
8	2N3959	HOUSING ASSEM.	1
9	5M6214	PLUG	11
10	3N3687	IMPELLER	1
11	3N2800	SEAL ASSEM.	1
12	2N3952	SLINGER	1
13	8H9520	SEAL	1
14	6B924	BEARING	1
15	2N3951	SPACER	1
16	3N6936	SHAFT	1
17	2N3950	BEARING	1
18	7L8764	GEAR (30 teeth)	1
19	1L8490	RING	1
20	2N3948	SPACER	1
21	2N3958	NUT	1

5N3720 AUXILIARY WATER PUMP ASSEMBLY
Part of 3N936 Auxiliary Pump Group shown on Page 92-5d

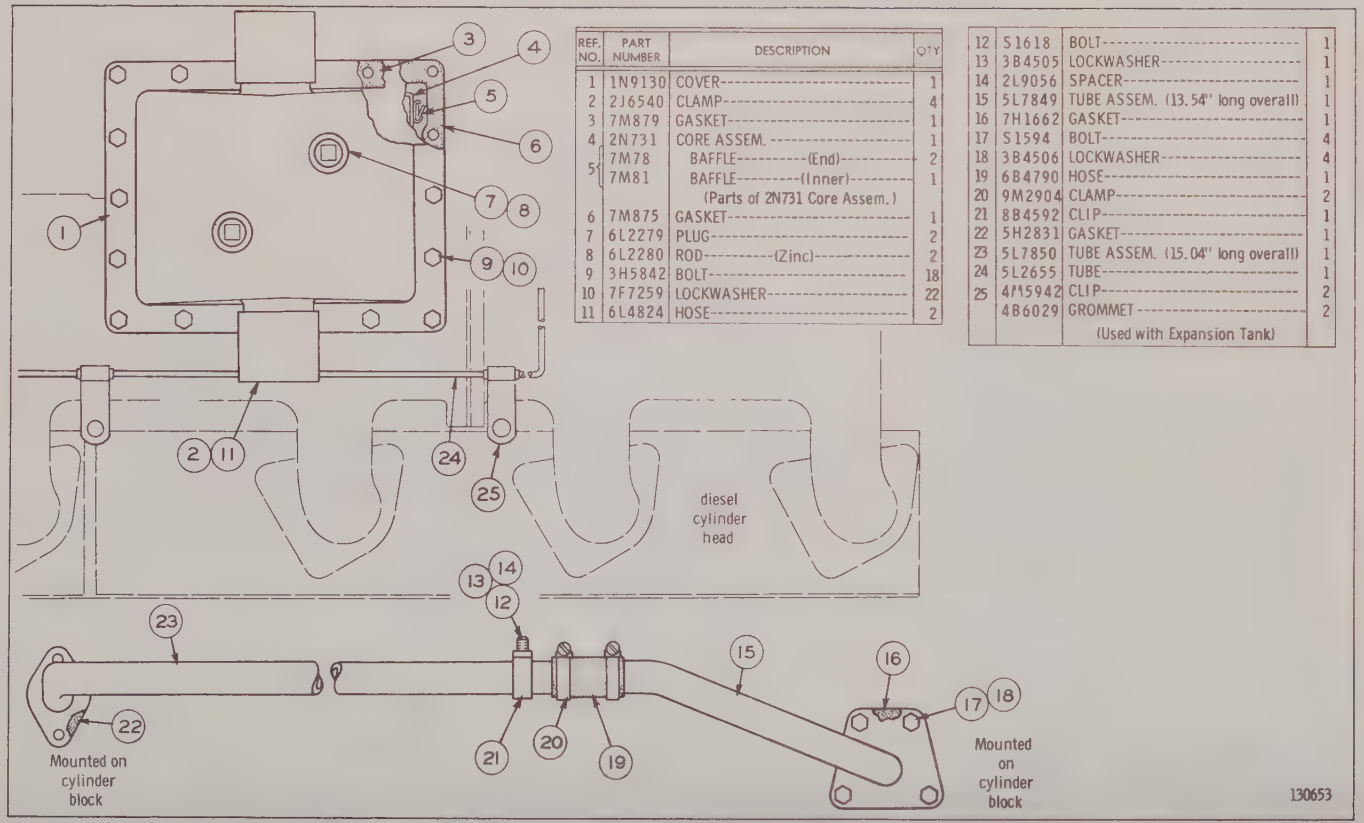
7L4385 RAW WATER AFTERCOOLER AND LINES GROUP
FOR USE WITH WOODWARD GOVERNOR

Only separate parts serviced. When complete group is required order 2N8443 shown on Page 92A



REF NO	PART NUMBER	DESCRIPTION	QTY
1	3B9067	FITTING	1
2	5H2831	GASKET	2
3	7M879	GASKET	1
4	5L2498	CORE ASSEM.	1
5	7M78	BAFFLE-(End)	2
	7M81	BAFFLE-(Inner)	1
		(Parts of 5L2498 Core Assem.)	
6	7M875	GASKET	1
7	6L2279	PLUG	2
8	6L2280	ROD-(Zinc)	2
9	3H5842	BOLT	18
10	7F7259	LOCKWASHER	22
11	6L4824	HOSE	2
12	S-1618	BOLT	1
13	3B4505	LOCKWASHER	1
14	2L9056	SPACER	1
		(used without gasoline starting engine)	

REF NO	PART NUMBER	DESCRIPTION	QTY
15	5L7849	TUBE ASSEM. (13.54" long overall)	1
16	7H1662	GASKET	1
17	S-1594	BOLT	4
18	3B4506	LOCKWASHER	4
19	6B4790	HOSE	1
20	9M2904	CLAMP	2
21	8B4592	CLIP	1
22	5H2831	GASKET	1
23	5L7850	TUBE ASSEM. (15.04" long overall)	1
		(used without gasoline starting engine)	
24	2J6540	CLAMP	2
25	3H6740	BOLT	2
26	1L8038	BOLT	2
27	5L5532	ELBOW	1
28	5L7389	COVER	1

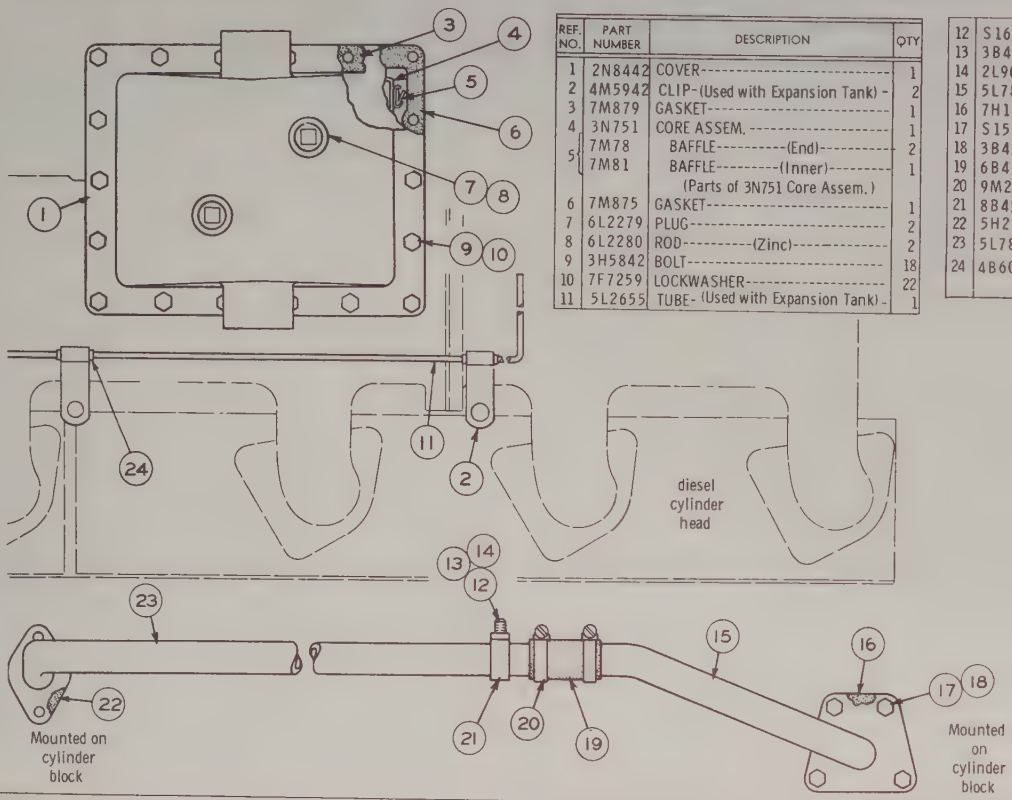


REF. NO.	PART NUMBER	DESCRIPTION	QTY
1	1N9130	COVER	1
2	2J6540	CLAMP	4
3	7M879	GASKET	1
4	2N731	CORE ASSEM.	1
5	7M78	BAFFLE-(End)	2
	7M81	BAFFLE-(Inner)	1
		(Parts of 2N731 Core Assem.)	
6	7M875	GASKET	1
7	6L2279	PLUG	2
8	6L2280	ROD-(Zinc)	2
9	3H5842	BOLT	18
10	7F7259	LOCKWASHER	22
11	6L4824	HOSE	2

12	S1618	BOLT	1
13	3B4505	LOCKWASHER	1
14	2L9056	SPACER	1
15	5L7849	TUBE ASSEM. (13.54" long overall)	1
16	7H1662	GASKET	1
17	S1594	BOLT	4
18	3B4506	LOCKWASHER	4
19	6B4790	HOSE	1
20	9M2904	CLAMP	2
21	8B4592	CLIP	1
22	5H2831	GASKET	1
23	5L7850	TUBE ASSEM. (15.04" long overall)	1
24	5L2655	TUBE	1
25	4M5942	CLIP	2
	4B6029	GROMMET	2
		(Used with Expansion Tank)	

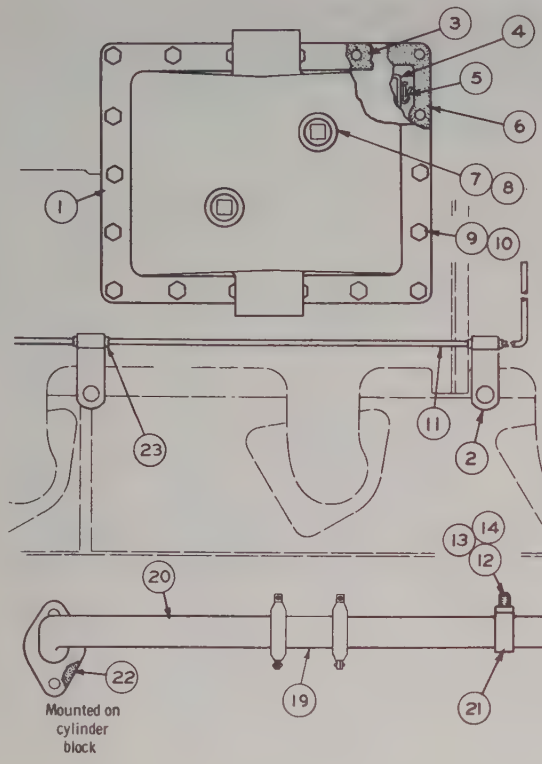
1N9450 RAW WATER AFTERCOOLER GROUP
FOR USE WITH WOODWARD GOVERNOR
Only separate parts serviced. When complete group is required order 2N8443

2N8443 SEA WATER AFTERCOOLER GROUP
FOR USE WITH WOODWARD GOVERNOR



REF. NO.	PART NUMBER	DESCRIPTION	QTY
1	2N8442	COVER	1
2	4M5942	CLIP-(Used with Expansion Tank)	2
3	7M879	GASKET	1
4	3N751	CORE ASSEM.	1
5	7M78	BAFFLE-(End)	2
	7M81	BAFFLE-(Inner)	1
		(Parts of 3N751 Core Assem.)	
6	7M875	GASKET	1
7	6L2279	PLUG	2
8	6L2280	ROD-(Zinc)	2
9	3H5842	BOLT	18
10	7F7259	LOCKWASHER	22
11	5L2655	TUBE-(Used with Expansion Tank)	1
12	S1618	BOLT	1
13	3B4505	LOCKWASHER	1
14	2L9056	SPACER	1
15	5L7849	TUBE ASSEM. (13.54" long overall)	1
16	7H1662	GASKET	1
17	S1594	BOLT	4
18	3B4506	LOCKWASHER	4
19	6B4790	HOSE	1
20	9M2904	CLAMP	2
21	8B4592	CLIP	1
22	5H2831	GASKET	1
23	5L7850	TUBE ASSEM. (15.04" long overall)	1
24	4B6029	GROMMET (Used with Expansion Tank)	2

2N8443 SEA WATER AFTERCOOLER GROUP—Type 2
FOR USE WITH WOODWARD GOVERNOR

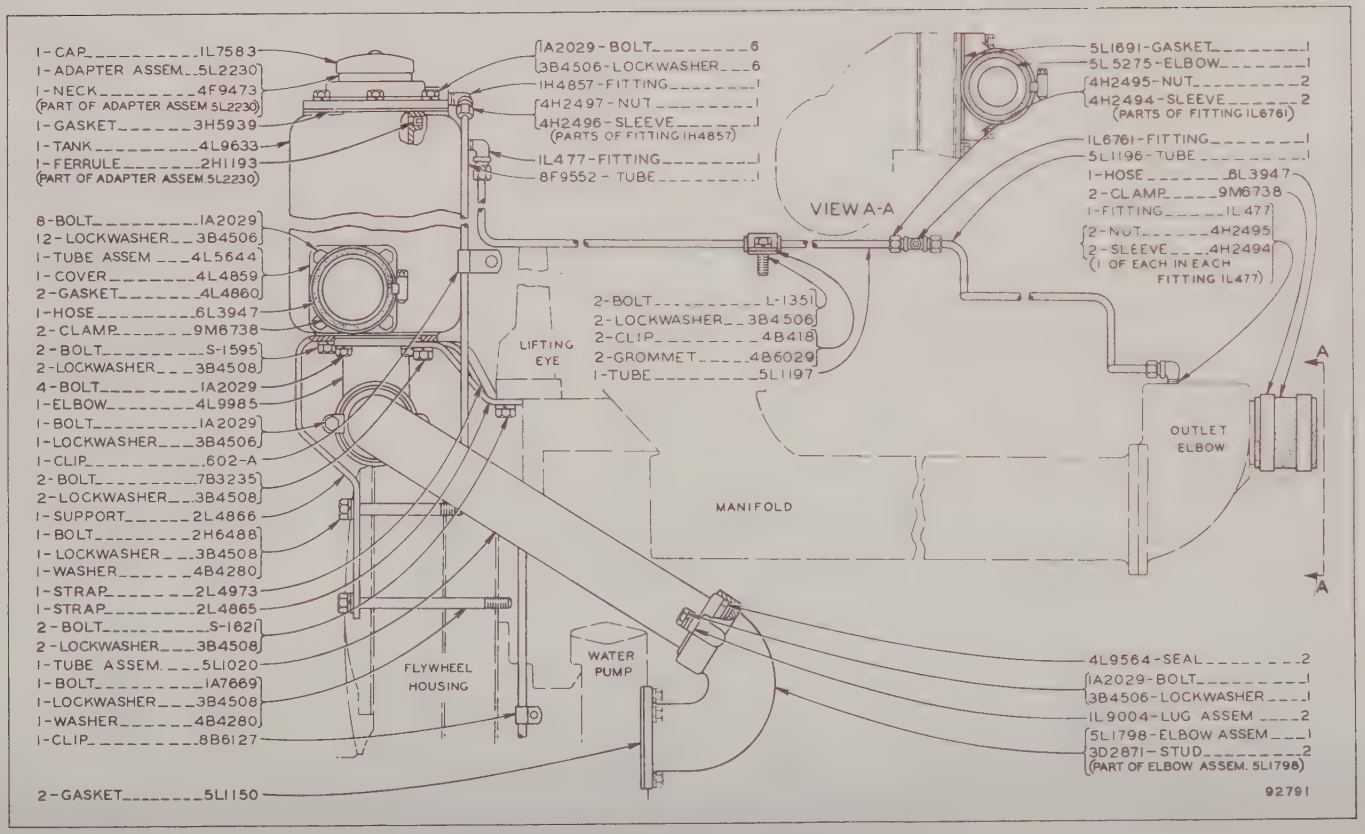


REF. NO.	PART NUMBER	DESCRIPTION	QTY
1	2N8442	COVER	1
2	4M5942	CLIP-(Used with Expansion Tank)	2
3	7M879	GASKET	1
4	3N751	CORE ASSEM.	1
5	7M78	BAFFLE-(End)	2
	7M81	BAFFLE-(Inner)	1
		(Parts of 3N751 Core Assem.)	
6	7M875	GASKET	1
7	6L2279	PLUG	2
8	6L2280	ROD-(Zinc)	2
9	3H5842	BOLT	18
10	7F7259	LOCKWASHER	22
11	5L2655	TUBE-(Used with Expansion Tank)	1

	REF. NO.	PART NUMBER	DESCRIPTION	QTY
	12	S1618	BOLT	1
	13	3B4505	LOCKWASHER	1
	14	2L9056	SPACER	1
C	15	3N3998	TUBE ASSEM.	1
	16	7H1662	GASKET	1
	17	S1594	BOLT	4
	18	3B4506	LOCKWASHER	4
C	19	4S407	JOINT	1
		7K7973	SEAL	2
C	20	3N3996	TUBE ASSEM.	1
	21	8B4592	CLIP	1
	22	5H2831	GASKET	1
	23	4B6029	GROMMET	2
			(Used with Expansion Tank)	

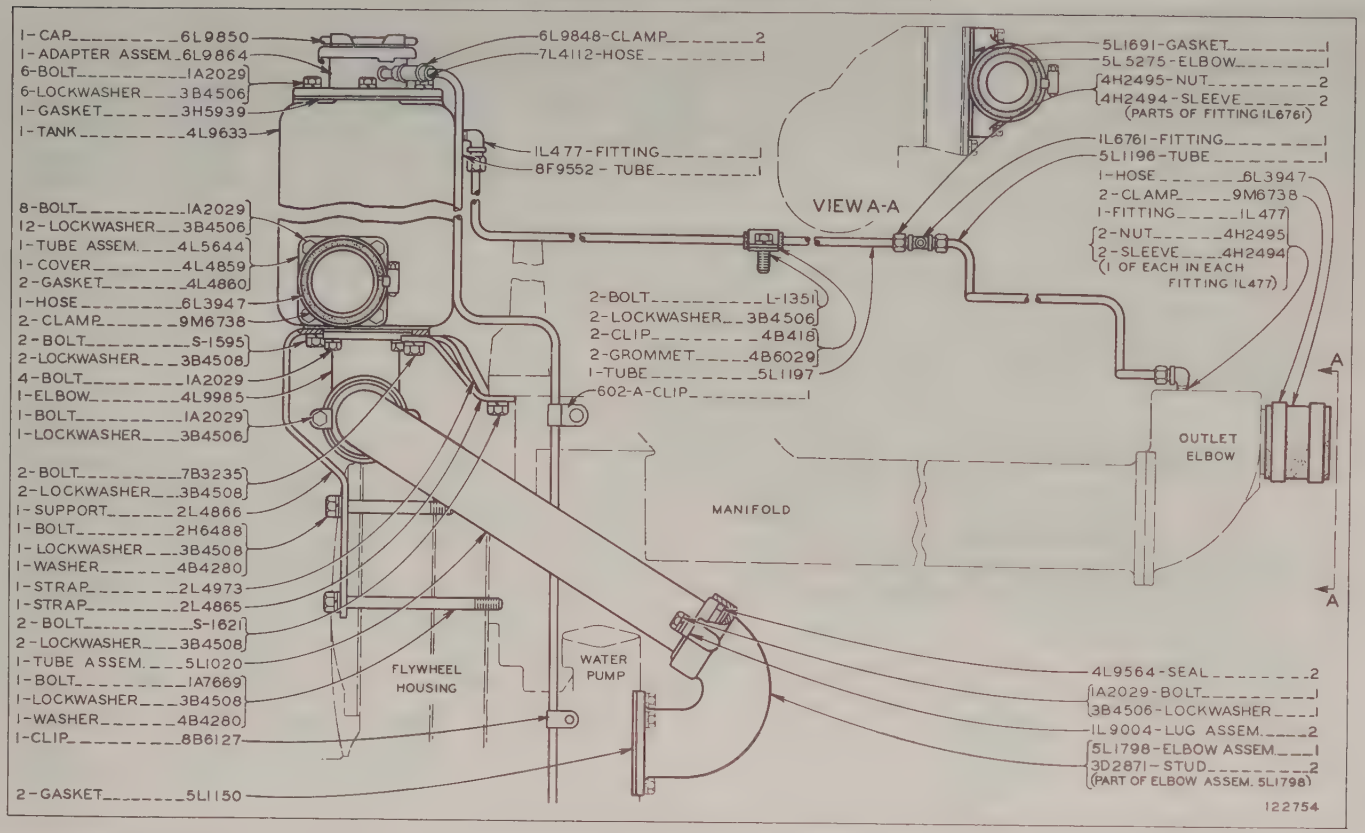
C INDICATES CHANGE

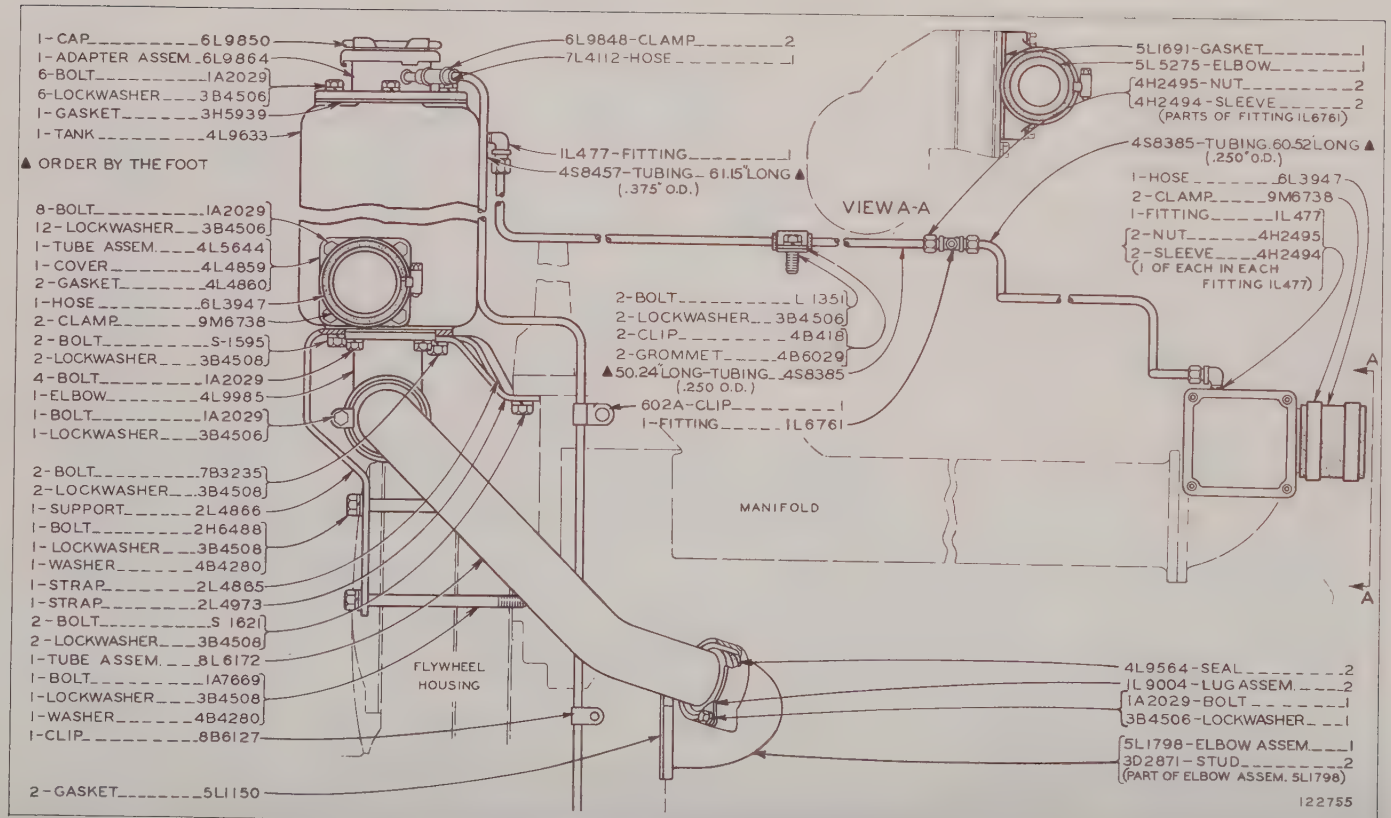
143839



5L2226 SURGE TANK AND WATER LINES GROUP—Type 1
Serial No. 46B1558 to 46B2436 inclusive and 77B1—Up

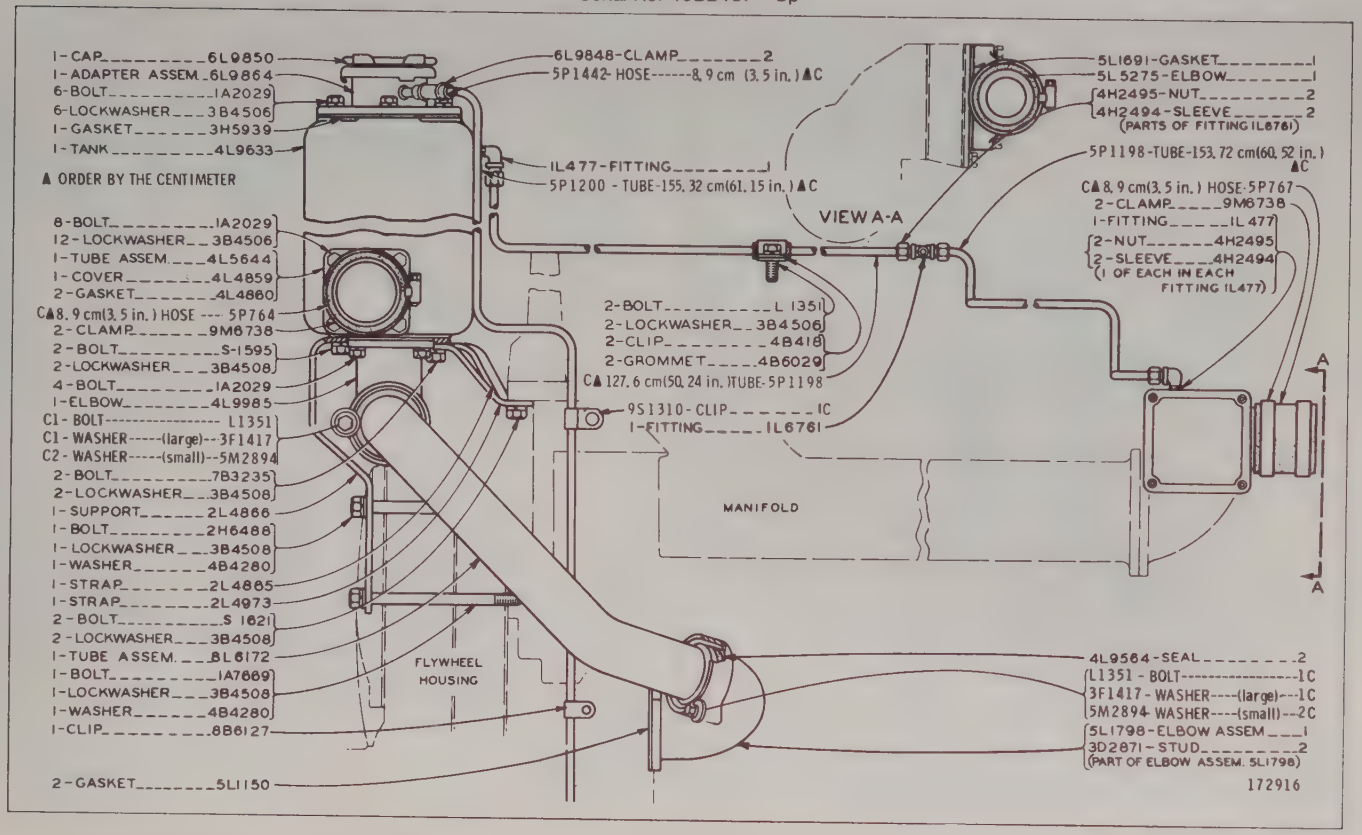
5L2226 SURGE TANK AND WATER LINES GROUP—Type 2
Serial No. 46B1558 to 46B2436 inclusive and 77B1-Up

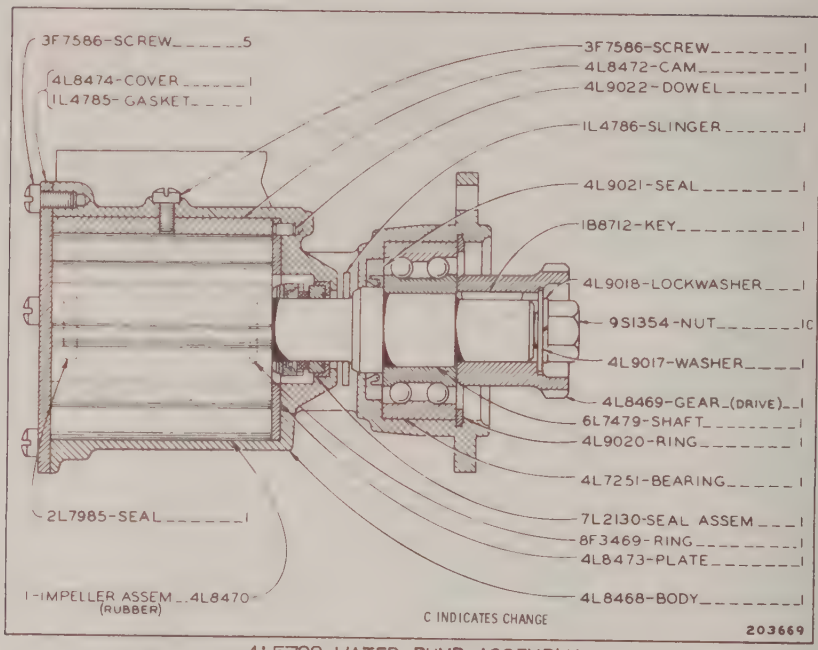




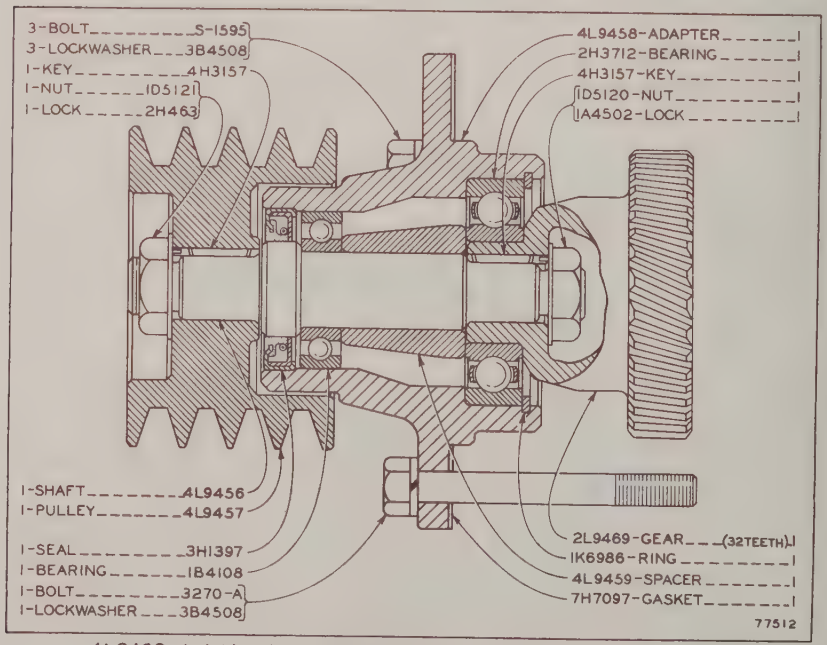
8L6392 EXPANSION TANK AND WATER LINES GROUP—Type 1
Serial No. 46B2437—Up

8L6392 EXPANSION TANK AND WATER LINES GROUP—Type 2
Serial No. 46B2437—Up

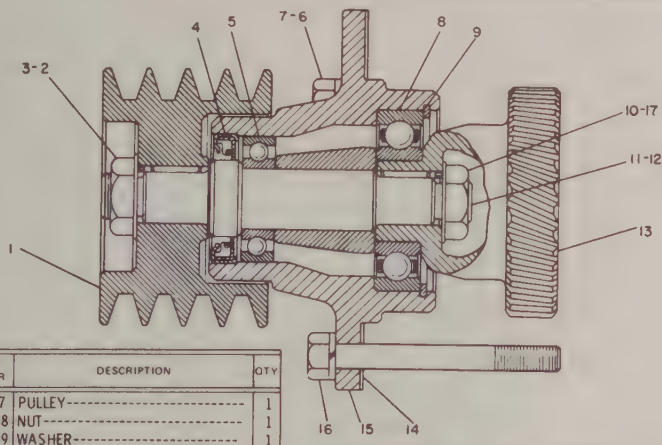




4L5788 WATER PUMP ASSEMBLY
PART OF 5L2237 AUXILIARY WATER PUMP GROUP SHOWN ON PAGE 92



4L9460 AUXILIARY DRIVE GROUP--R.H.--2.438:1 RATIO
FOR USE WITH ATTACHMENTS NOT EXCEEDING 21 HORSEPOWER



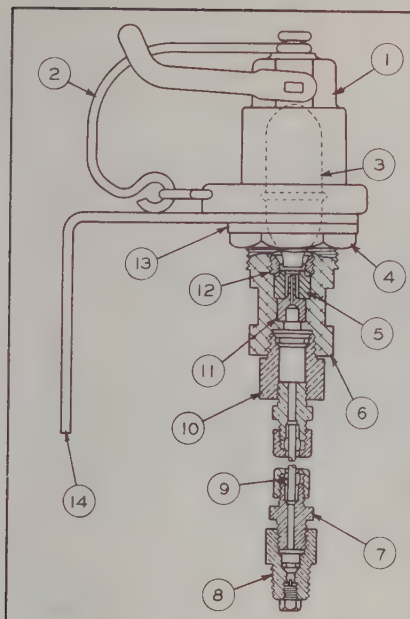
	REF NO	PART NUMBER	DESCRIPTION	QTY
	1	4L9457	PULLEY	1
C	2	1B4208	NUT	1
C	3	5P8249	WASHER	1
	4	3H1397	SEAL	1
C	5	7L7508	BEARING	1
	6	S1595	BOLT	3
	7	3B4508	LOCKWASHER	3
	8	2H3712	BEARING	1
	9	1K6986	RING	1
C	10	1B4207	NUT	1

C	11	8N3287	SHAFT	1
	12	4H3157	KEY	2
	13	2L9469	GEAR---------(32 teeth)----------	1
	14	7H7097	GASKET	1
	15	4L9458	ADAPTER	1
C	16	8S9089	BOLT	1
C	17	5P8248	WASHER	1

C INDICATES CHANGE

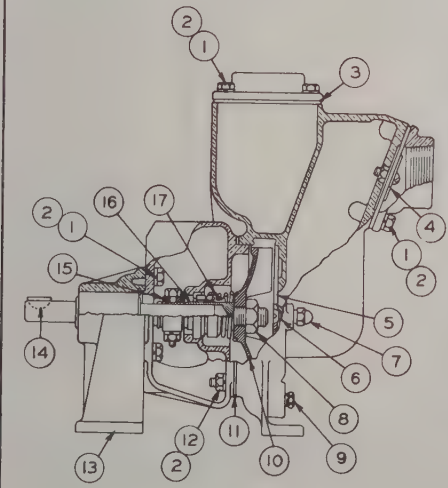
173487

4L9460 AUXILIARY DRIVE GROUP—R.H.—2.438:1 Ratio—Type 2
FOR USE WITH ATTACHMENTS NOT EXCEEDING 21 HORSEPOWER



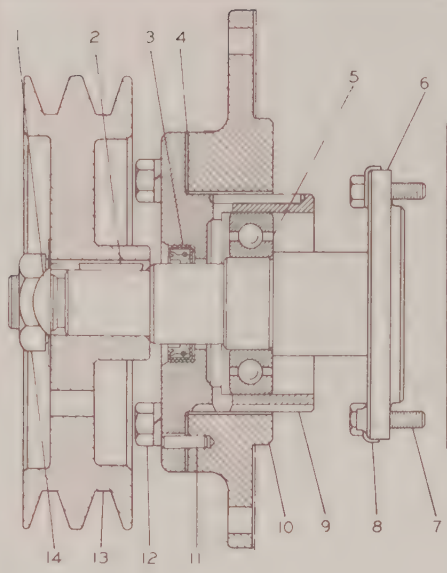
REF NO	PART NUMBER	DESCRIPTION	QTY
1	9F6358	CAP ASSEM.	1
2	9F6370	BAIL	1
		(Part of 9F6358 Cap Assem.)	
3	▲ 9F739	CARTRIDGE	1
4	9F6360	NUT	1
5	9F6363	WASHER	1
6	7L4635	BODY	1
7	7L4637	FITTING	2
8	7L4638	NOZZLE ASSEM.	1
9	7L4636	TUBE----------(84" Long)	1
10	1M1126	SCREEN ASSEM.	1
11	9F6364	PIN	1
12	7L4639	SCREW	1
13	9F6361	WASHER	1
14	7L4640	BRACKET	1
	▲ Not part of 4L4984 Ether Starting Aid Kit		

4L4984 ETHER STARTING AID KIT



REF. NO.	PART NUMBER	DESCRIPTION	QTY
1	8L4509	BOLT	12
2	3L6789	LOCKWASHER	18
3	8L4460	GASKET	1
4	8L4465	FLAPPER ASSEM.	1
5	8L4461	PLATE ASSEM.	1
	8L4456	GASKET	2
6	8L4468	SCREW	2
		(Parts of 8L4461 Plate Assem.)	
7	8L4464	NUT----------(Acorn)	2
8	8L4462	NUT----------(Jam)	1
9	8L4466	PLUG	1
10	8L4463	IMPELLER	1
11	8L4459	GASKET	4
12	4K9823	NUT	6
13	8L4455	PEDESTAL ASSEM.	1
14	1B8710	KEY	1
		(Part of 8L4455 Pedestal Assem.)	
15	8L8451	CLAMP ASSEM.	1
16	8L4458	SLEEVE	1
17	8L4467	SEAL ASSEM.	1

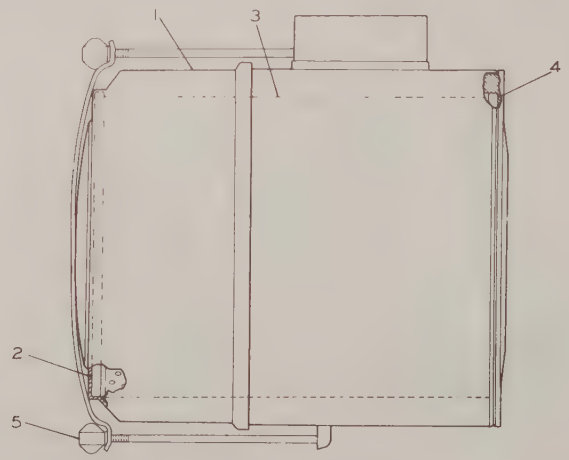
8L3915 CENTRIFUGAL PUMP ASSEMBLY—Sea Water Field Installation



REF. NO.	PART NUMBER	DESCRIPTION	QTY
1	3L7685	LOCK	1
2	4H3157	KEY	1
3	9H8839	SEAL	1
4	2N5513	GASKET	1
5	8H9789	BEARING	1
6	2N5514	SHAFT ASSEM.	1
7	S1615	BOLT	4
8	7F2836	LOCK	4
9	2N5515	CAGE	1
10	5L2208	ADAPTER	1
11	4H8380	PIN	1
12	S1594	BOLT	6
	3B4506	LOCKWASHER	6
13	3L1060	PULLEY	1
14	1D5121	NUT	1

137638

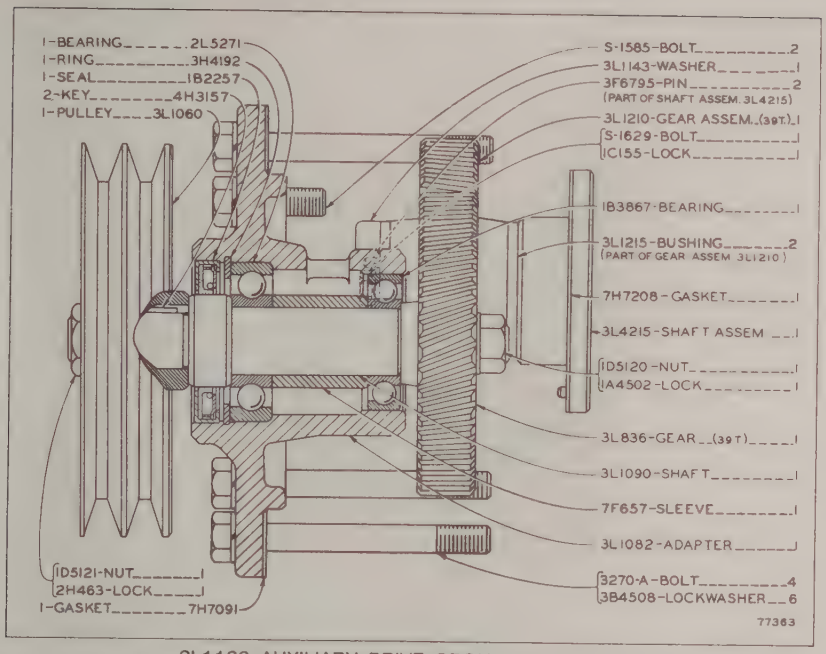
2N5517 AUXILIARY DRIVE GROUP—1.733:1 Ratio
Serial No. 46B3889—Up
FOR USE WITH ATTACHMENT NOT EXCEEDING 15 HORSEPOWER



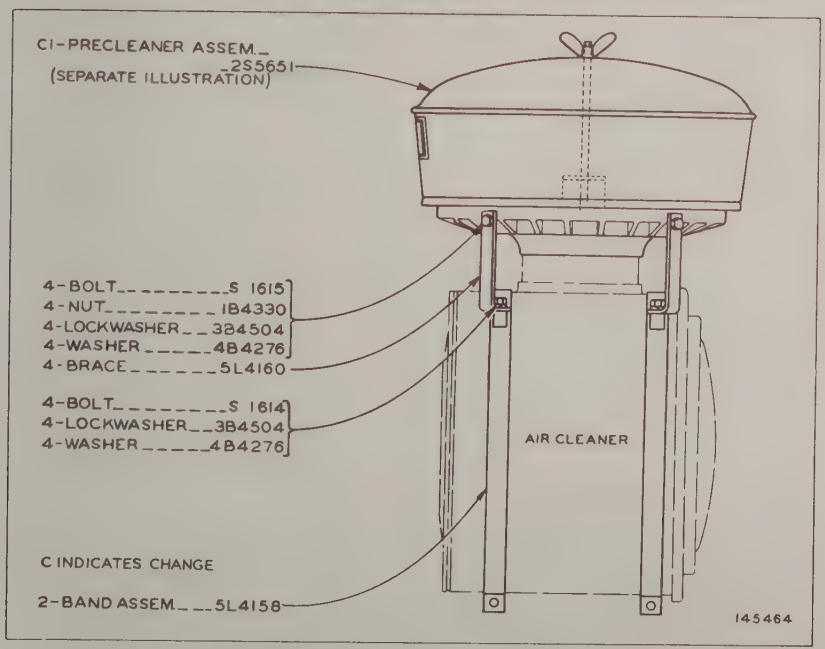
REF. NO.	PART NUMBER	DESCRIPTION	QTY
1	5L1390	COVER ASSEM.	1
2	5L1189	GASKET	1
3	5L1203	ELEMENT ASSEM.	1
4	5L1189	GASKET	1
5	5L1389	BOLT ASSEM.	2

142888

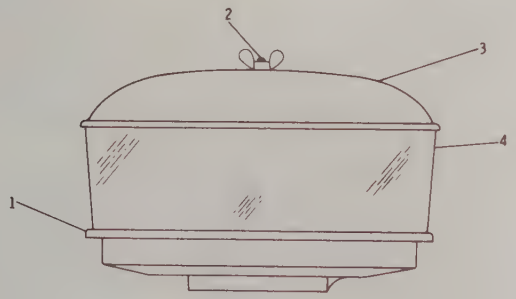
7L5628 AIR CLEANER GROUP
FOR USE WITH 4L4795 CAP OR 5L4157 PRECLEANER ONLY



3L1132 AUXILIARY DRIVE GROUP—L.H.—2:1 Ratio
FOR USE WITH ATTACHMENTS NOT EXCEEDING 15 HORSEPOWER
CANNOT BE USED WITH CENTRIFUGAL SEA OR FRESH WATER PUMP



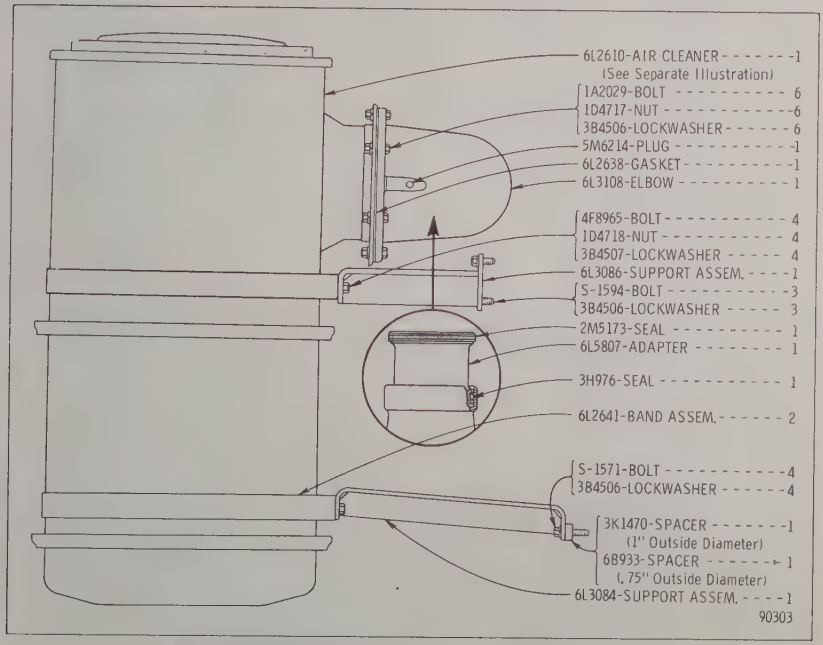
5L4157 PRECLEANER GROUP
FOR USE WITH 7L5628 AIR CLEANER GROUP ONLY
2S5651 Precleaner parts are shown on Page 95B



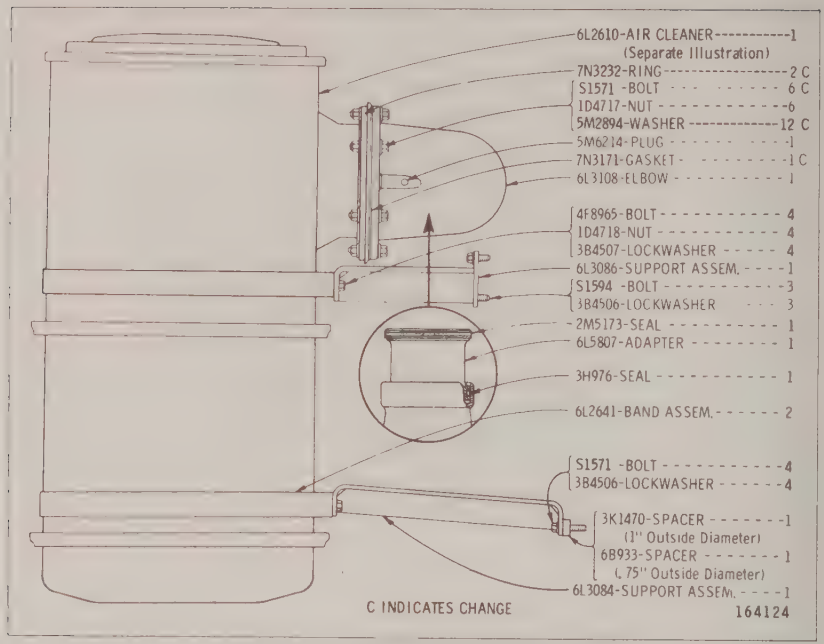
REF. NO.	PART NUMBER	DESCRIPTION	QTY
1	1S9407	SLEEVE ASSEM.	1
2	3S2957	BOLT	1
	3S9121	WASHER	1
3	2S2493	COVER ASSEM.	1
4	2S6708	COLLECTOR	1

210682

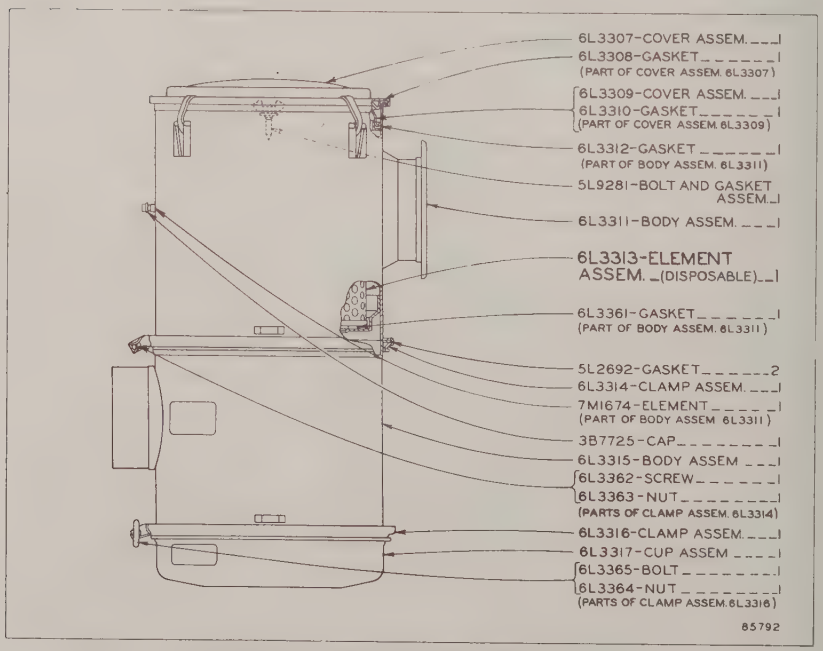
2S5651 PRECLEANER ASSEMBLY
Part of 5L4157 Air Precleaner Group shown on Page 95



6L5808 AIR CLEANER GROUP—Two Stage—Type 1
6L2610 Air Cleaner parts are shown on Page 96



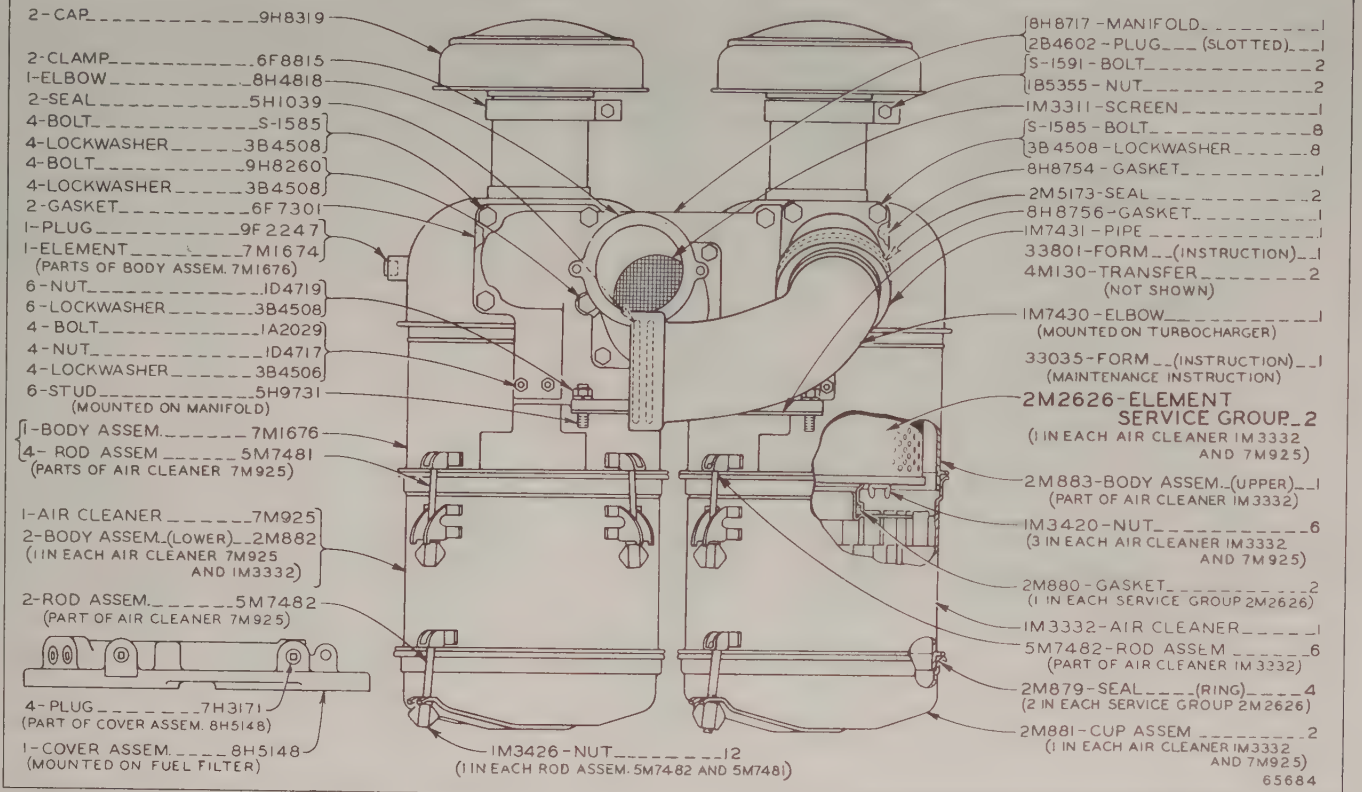
6L5808 AIR CLEANER GROUP—Two Stage—Type 2
6L2610 Cleaner parts are shown on Page 96

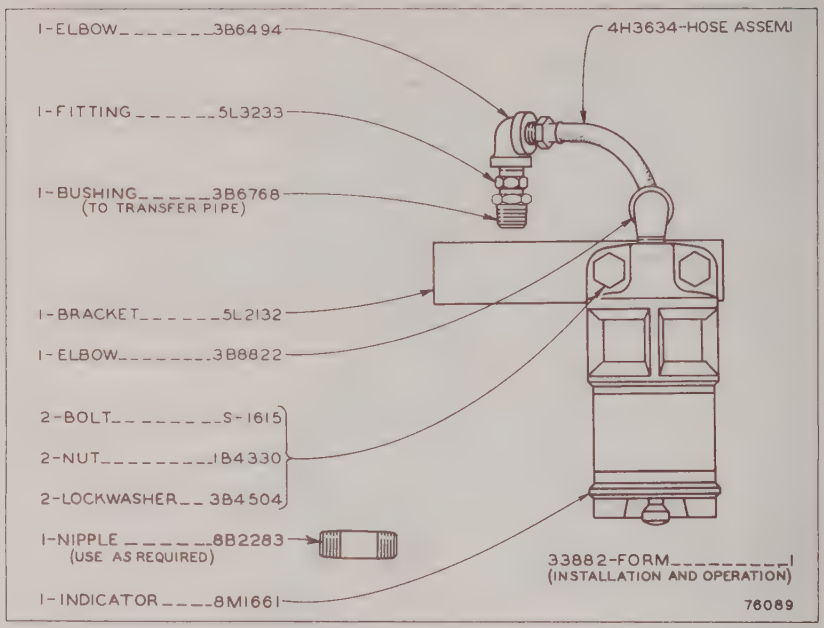


6L2610 AIR CLEANER ASSEMBLY
Part of 6L5808 Air Cleaner Group shown on Pages 95B & 96

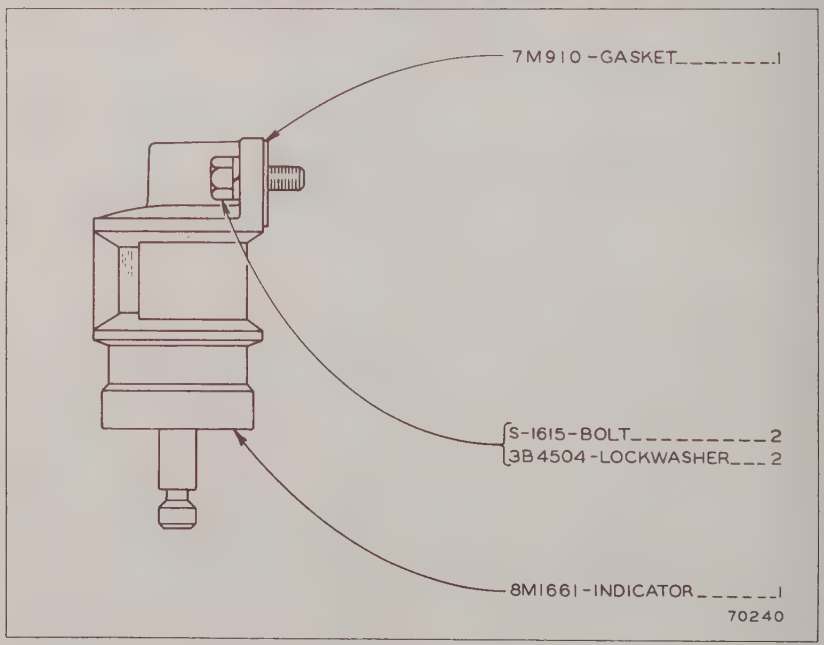
5L1802 AIR CLEANER GROUP—Two Stage—Field Installation

Note: Certain attachments may cause interference in mounting

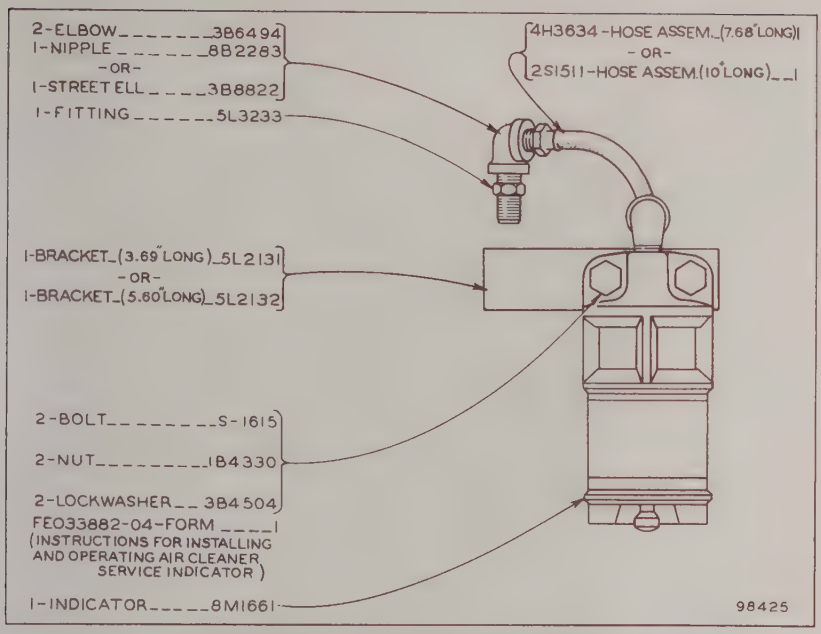




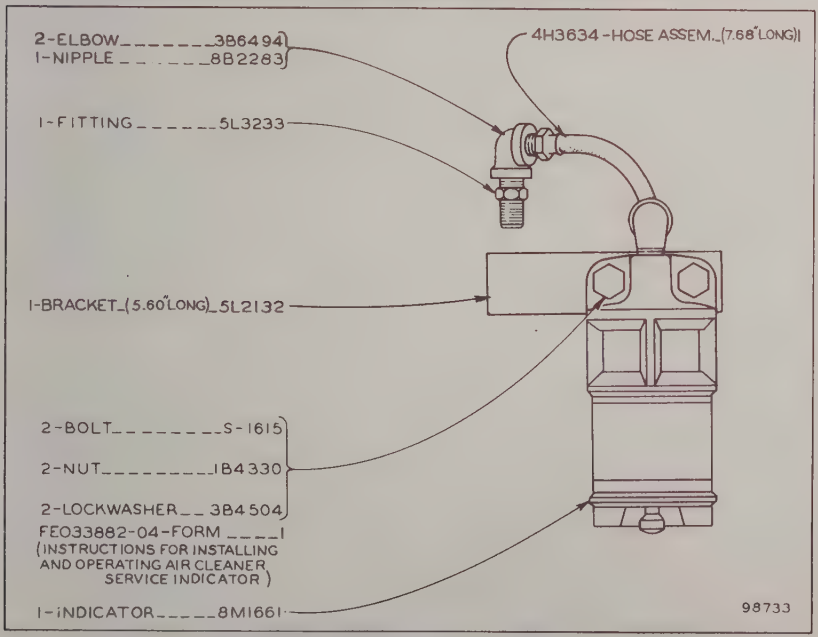
5L2130 AIR FILTER INDICATOR GROUP
FOR USE WITH SINGLE STAGE, DRY TYPE AIR CLEANER
Serial No. 46B1558 to 3292, 3294, 3295, 46B3309 and 46B3322 inclusive
Only separate parts serviced. When complete group is required order 7L7412



5L4214 AIR FILTER INDICATOR GROUP
FOR USE WITH TWO STAGE, DRY TYPE AIR CLEANER



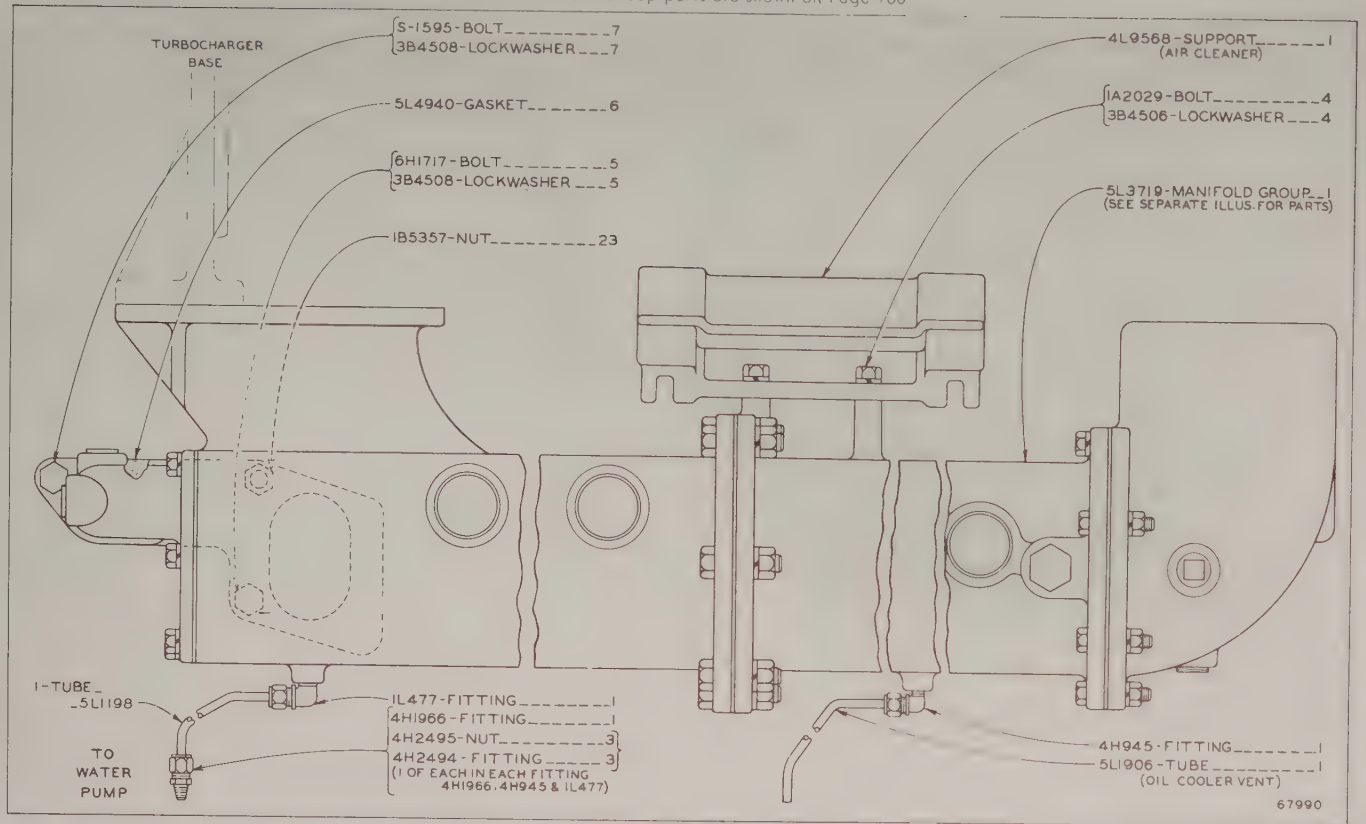
7L6784 AIR FILTER INDICATOR GROUP
FOR USE WITH SINGLE STAGE, DRY TYPE AIR CLEANER
Serial No. 46B1558 to 3292, 3294, 3295, 46B3309 and 46B3322 inclusive
Only separate parts serviced. When complete group is required order 7L7412

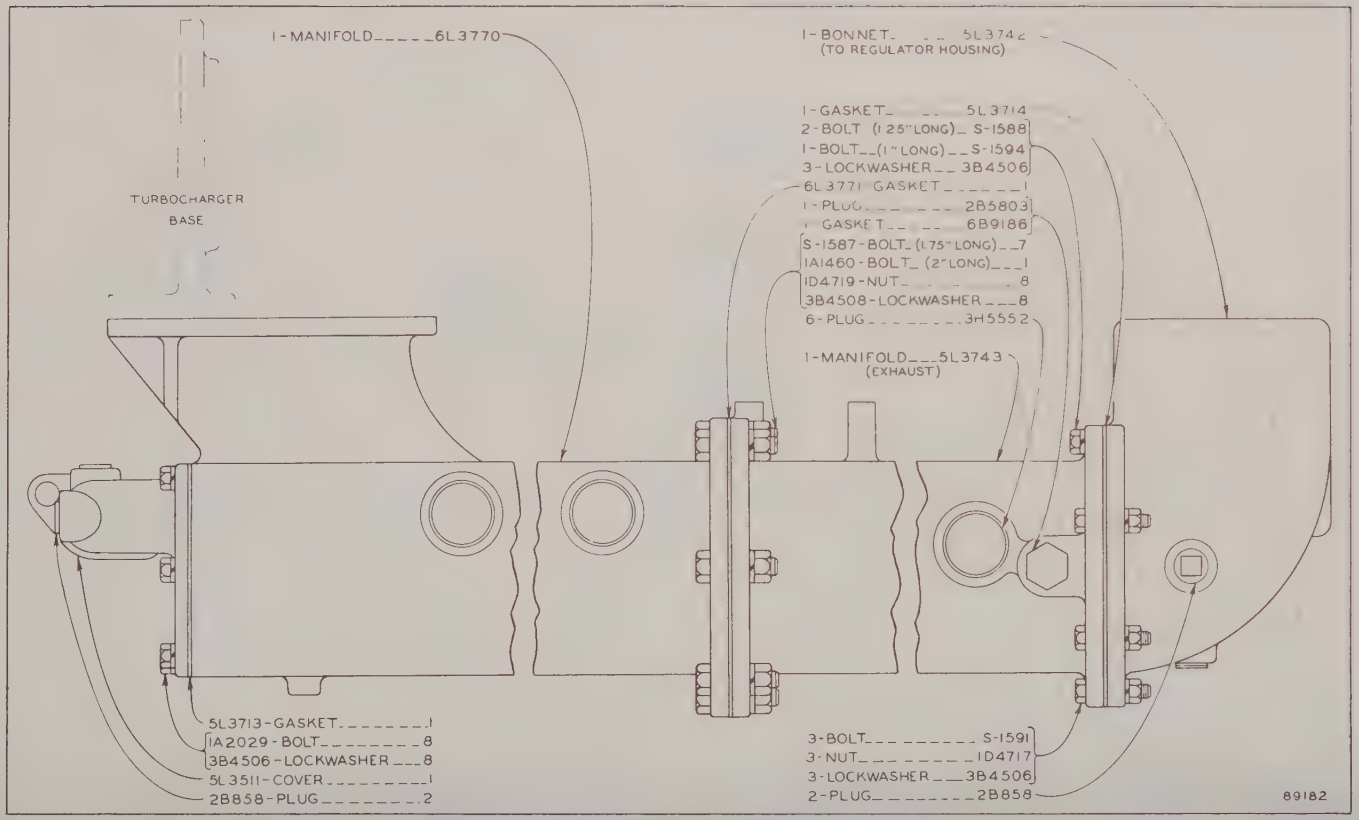


7L7412 AIR FILTER INDICATOR GROUP
FOR USE WITH SINGLE STAGE, DRY TYPE AIR CLEANER
Serial No. 46B1558 to 3292, 3294, 3295, 46B3309 and 46B3322 inclusive

5L2187 WATER COOLED EXHAUST MANIFOLD GROUP

5L3719 Manifold Group parts are shown on Page 100



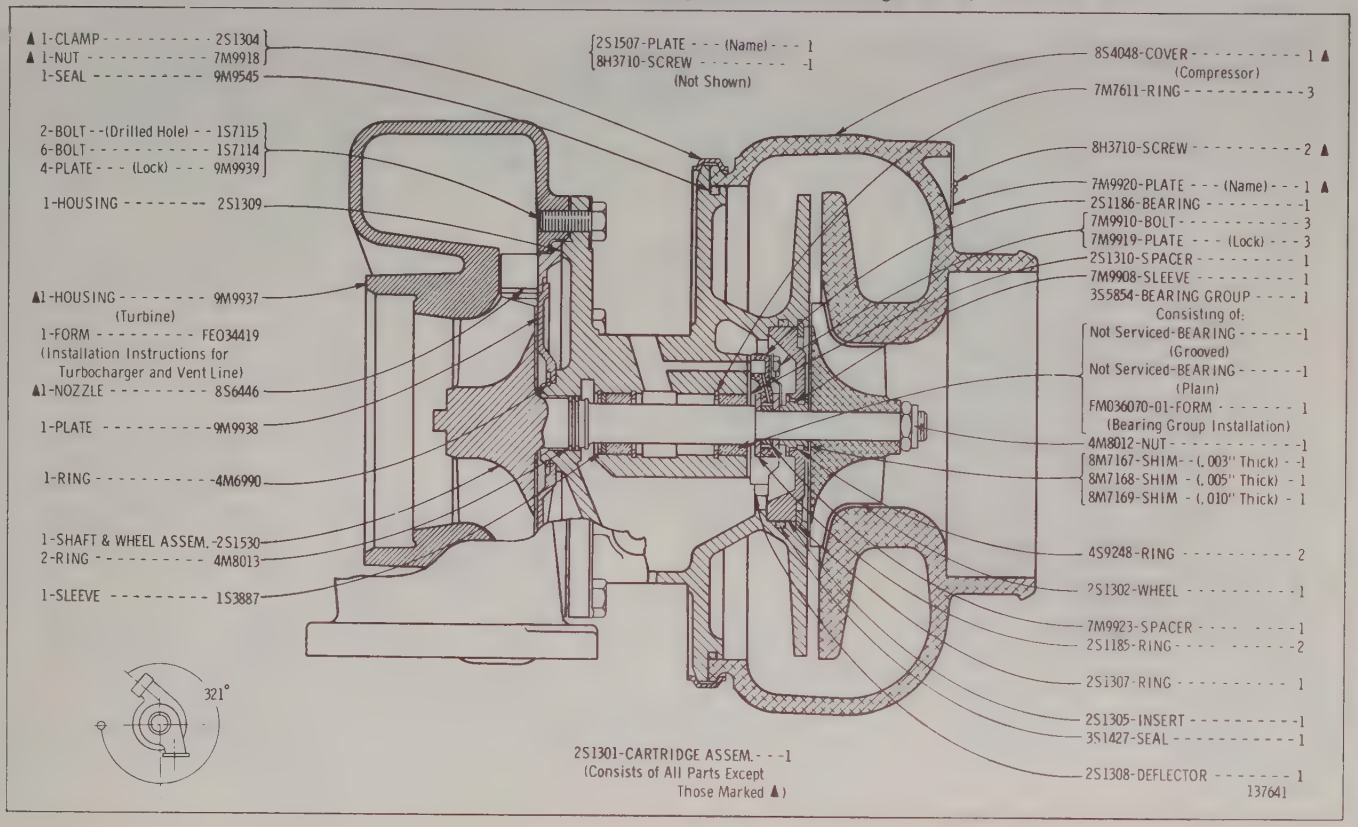


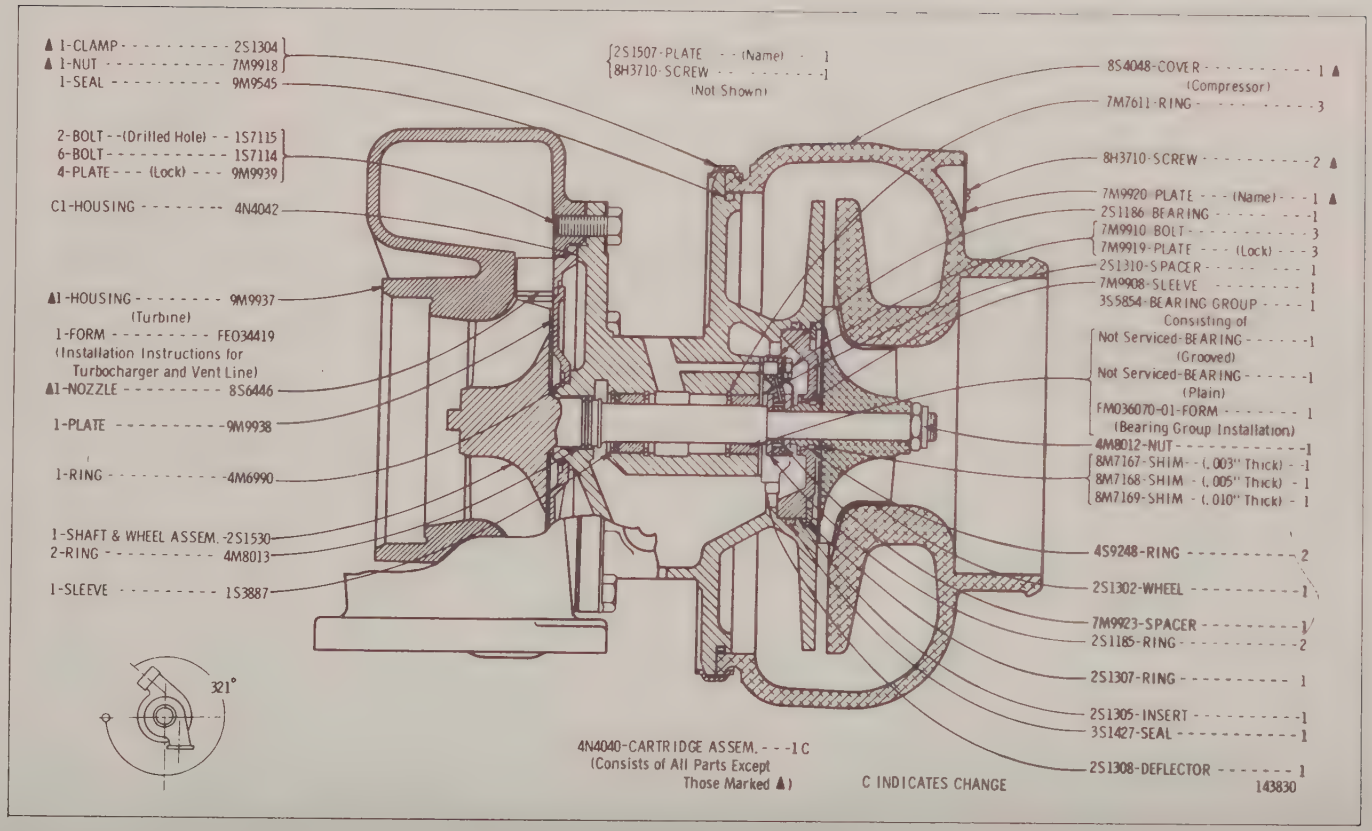
5L3719 MANIFOLD GROUP

Part of 5L2187 Water Cooled Exhaust Manifold shown on Page 99

2P1780 TURBOCHARGER GROUP—Type 1

Part of 8L4221, 8L4121 and 6N1313 Conversion Arrangements listed on Pages 100-5, 100A-1 and 100A-3

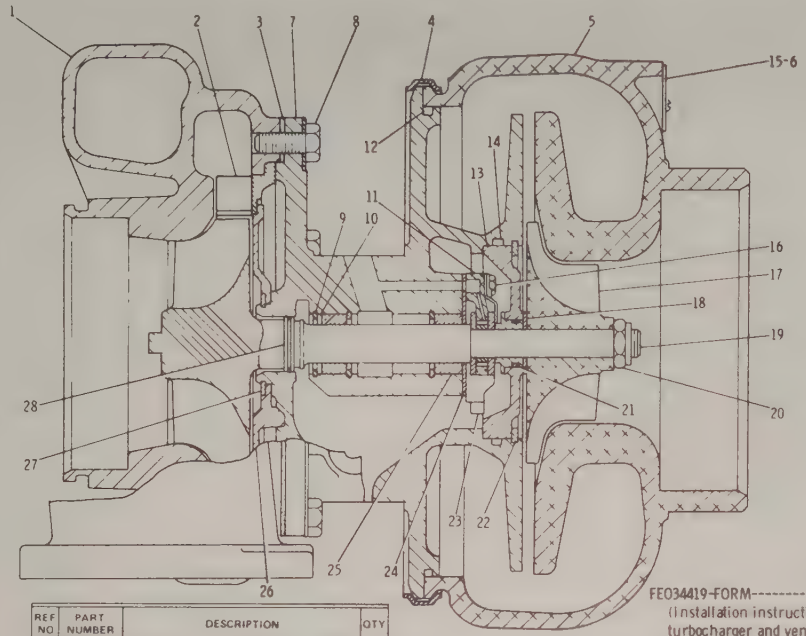




2P1780 TURBOCHARGER GROUP—Type 2
Part of 8L4121 Conversion Arrangement listed on Pages 100A and 100A-1

6N9491 TURBOCHARGER GROUP

Part of 4N8293 Conversion Arrangement and 6N3131 Engine Conversion Arrangement listed on Pages 100A-2 and 100A-3



REF NO	PART NUMBER	DESCRIPTION	QTY
1	6N8453	HOUSING--------(turbine)--------	1
2	1P1252	NOZZLE----------	1
3	4N4044	GASKET----------	1
4	2S1304	CLAMP----------	1
	7M9918	NUT----------	1

5	8S4048	COVER--------(compressor)-----	1
6	7M9920	PLATE--------(name)----------	1
	8H3710	SCREW----------	2

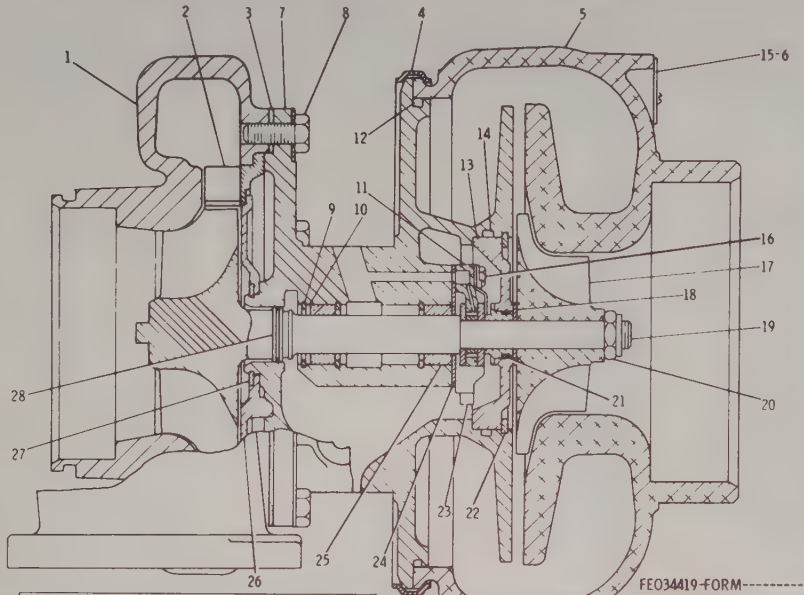
FE034419-FORM---------- 1
(Installation instructions for turbocharger and vent line)
SMHS6776-FORM---------- 1
(kit-installation)

7	4N4040	CARTRIDGE ASSEM. ----------	1
		(Includes)	
	4N4042	HOUSING----------	1
8	1S7114	BOLT----------	8
	9M9939	PLATE--------(lock)---------	4
▲ 9	7M7611	RING----------	3
▲ 10	1S3887	SPACER----------	1
	2S1186	BEARING----------	1
11	2S1185	RING----------	2
▲	7M9923	SPACER----------	1
▲ 12	9M9545	SEAL----------	1
13	2S1305	INSERT----------	1
▲ 14	3S1427	SEAL----------	1
15	2S1507	PLATE--------(name)-------	1
	8H3710	SCREW----------	1
	7M9910	BOLT----------	3
16	7M9919	PLATE--------(lock)---------	3
▲			
17	2S1302	WHEEL----------	1
▲	8M7167	SHIM--,076 mm(.003 in.) thick	1
▲ 18	8M7168	SHIM--,127 mm(.005 in.) thick	1
▲	8M7169	SHIM--,254 mm(.010 in.) thick	1
19	2S1530	SHAFT AND WHEEL ASSEM. -----	1
▲ 20	6N9683	NUT----------	1
▲	4M8013	RING----------	1
▲ 21	7M9908	SLEEVE----------	1
▲ 22	2S1307	RING----------	1
▲ 23	2S1308	DEFLECTOR----------	1
▲ 24	2S1310	SPACER----------	1
▲ 25	3S5854	BEARING GROUP----------	1
		(Includes Plain & Grooved Bearing)	
26	9M9938	PLATE----------	1
▲ 27	4M6990	RING----------	1
▲ 28	4S9248	RING----------	2
	FE036070	FORM--(Bearing Group Installation)	1
		THE FOLLOWING REPAIR KIT IS AVAILABLE:	
	6N7244	KIT--------(cartridge)----------	1
		(Includes parts marked ▲)	

165449

8N2691 TURBOCHARGER GROUP

Part of 4N8293 Conversion Arrangement and 6N3131 Engine Conversion Arrangement listed on Pages 100A-2 and 100A-3



REF NO	PART NUMBER	DESCRIPTION	QTY
1	4N4571	HOUSING--------(turbine)----------	1
2	1P1252	NOZZLE----------	1
3	4N4044	GASKET----------	1
4	2S1304	CLAMP----------	1
	7M9918	NUT----------	1

5	8S4048	COVER---------(compressor)-----	1
6	7M9920	PLATE--------(name)----------	1
	8H3710	SCREW----------	2

FE034419-FORM---------- 1
(Installation instructions for turbocharger and vent line)
▲ SMHS6776-FORM---------- 1
(kit-installation)

7	4N4040	CARTRIDGE ASSEM. ---------- (Includes)	1
	4N4042	HOUSING----------	1
8	1S7114	BOLT----------	8
	9M9939	PLATE--------(lock)----------	4
▲ 9	7M7611	RING----------	3
▲ 10	1S3887	SPACER----------	1
	7N3762	BEARING ASSEM. --(thrust)--	1
11	2S1185	RING----------	2
▲	7M9923	SPACER----------	1
▲ 12	9M9545	SEAL----------	1
13	2S1305	INSERT----------	1
▲ 14	3S1427	SEAL----------	1
15	2S1507	PLATE---------(name)-------	1
	8H3710	SCREW----------	1
16	7M9910	BOLT----------	3
▲	7M9919	PLATE--------(lock)----------	3
17	2S1302	WHEEL----------	1
▲	8M7167	SHIM--.076 mm(.003 in.) thick	1
▲ 18	8M7168	SHIM--.127 mm(.005 in.) thick	1
▲	8M7169	SHIM--.254 mm(.010 in.) thick	1
19	2S1530	SHAFT AND WHEEL ASSEM. -----	1
▲ 20	6N9683	NUT----------	1
▲	4M8013	RING----------	
▲ 21	7M9908	SLEEVE----------	1
▲ 22	2S1307	RING----------	1
▲ 23	2S1308	DEFLECTOR----------	1
▲ 24	2S1310	SPACER----------	1
▲ 25	3S5854	BEARING GROUP---------- (Includes Plain & Grooved Bearing)	1
26	9M9938	PLATE----------	1
▲ 27	4M6990	RING----------	1
▲ 28	4S9248	RING----------	2
	FE036070	FORM--(Bearing Group Installation)	1
		THE FOLLOWING REPAIR KIT IS AVAILABLE:	
	6N7244	KIT--------(cartridge)---------- (Includes parts marked ▲)	1

224222

		Consists of:	Page
1	6L5975	Oil Cooler Lines Group	100B
1	8L4192	Aftercooler Water Lines Group	100E
1	3N2917	Manifold Group	100D-1
1	2P1780	Turbocharger Group	100-3
1	2S2489	Turbocharger Assembly	105
4	1A2029	Bolt--Support to Manifold	
1	2B3243	Clip--Turbocharger Supply Line	
4	3B4506	Lockwasher--3/8"-Support to Manifold	
1	4B9302	Clip--Valve Tube	
24	3D490	Stud--Cylinder Head	
1	4L9568	Support--Air Cleaner	
1	7L2814	Tube Assembly--Turbocharger Drain	
1	7L2862	Tube--Valve to Turbocharger Supply	
1	8L8225	Tube Assembly--Turbocharger Supply	
1	7M7273	Gasket--Turbocharger	
1	8M5900	Fitting--Tube to Tube	
1	9M105	Fitting--Tube to Valve	
1	4S5718	Clip--Valve Tube	

8L4221 EBULLIENT COOLING CONVERSION ARRANGEMENT—
Factory Installation—Type 2
Serial No. 46B2437—Up

		Consists of:	Page
1	5L3719	Manifold Group	100
4	1A2029	Bolt-Support to Manifold	
23	1B5357	Nut-Manifold to Head	
4	3B4506	Lockwasher-Support to Manifold	
12	3B4508	Lockwasher-Manifold to Head	
1	4H945	Fitting-Tube to Manifold	
1	4H1966	Fitting to Water Pump	
5	6H1717	Bolt-Manifold to Head	
1	1L477	Fitting to Manifold	
1	4L9568	Support-Air Cleaner	
1	5L1198	Tube-Fitting to Fitting	
1	5L1906	Tube-Oil Cooler Vent	
6	5L4940	Gasket-Manifold to Head	
7	S1595	Bolt-Manifold to Head	

8L4121 CONVERSION ARRANGEMENT
Effective with Serial No. 46B2437
To convert from Dry Exhaust Manifolds to Water Cooled Exhaust Manifolds

		Consists of:	Page
1	6L5975	Oil Cooler Lines Group	100B
1	6L6007	Manifold Group	100D
1	8L4192	Aftercooler Water Lines Group	100E
1	2S2489	Turbocharger Assembly	105
4	1A2029	Bolt-Support to Manifold	
4	3B4506	Lockwasher-Support to Manifold	
1	4L9568	Support-Air Cleaner	

8L4221 EBULLIENT COOLING CONVERSION ARRANGEMENT—Factory Installation Only
Effective with Serial No. 46B2437

		Consists of:	Page
1	2P1780	Turbocharger Group..	100-3
4	1A2029	Bolt--Support to Manifold	
1	2B3243	Clip--Turbocharger Supply Tube	
1	2B5803	Plug--Manifold	
4	3B4506	Lockwasher--3/8" --Support to Manifold	
12	3B4508	Lockwasher--1/2" --Manifold to Head	
1	4B9302	Clip--Valve Tube	
1	6B9186	Gasket--Plug to Manifold	
24	3D490	Stud--Cylinder Head	
1	4H945	Fitting--Tube to Manifold	
1	4H1966	Fitting--To Water Pump	
3	3J5389	Plug--Manifold	
1	1L477	Fitting--To Manifold	
1	4L9568	Support--Air Cleaner	
1	5L1198	Tube--Fitting to Fitting	
6	5L4940	Gasket--Manifold to Head	
1	7L2814	Tube Assembly--Turbocharger Drain	
1	7L2862	Tube--Valve to Turbocharger Supply	
1	8L8225	Tube Assembly--Turbocharger Supply	
1	7M7273	Gasket--Turbocharger	
12	8M2530	Bolt--Manifold to Head	
1	8M5900	Fitting--Tube to Tube	
1	9M105	Fitting--Tube to Valve	
24	2N2280	Nut--Manifold to Head	
1	2N7073	Manifold Assembly	
1	2N7769	Tube--Oil Cooler Vent	
1	4S5718	Clip--Valve Tube	

8L4121 CONVERSION ARRANGEMENT—Type 2
Serial No. 46B2437—Up. To convert from Dry Exhaust Manifolds to Water Cooled Exhaust Manifolds
Only separate parts serviced. Order 4N8293 Arrangement listed on Page 100A-2

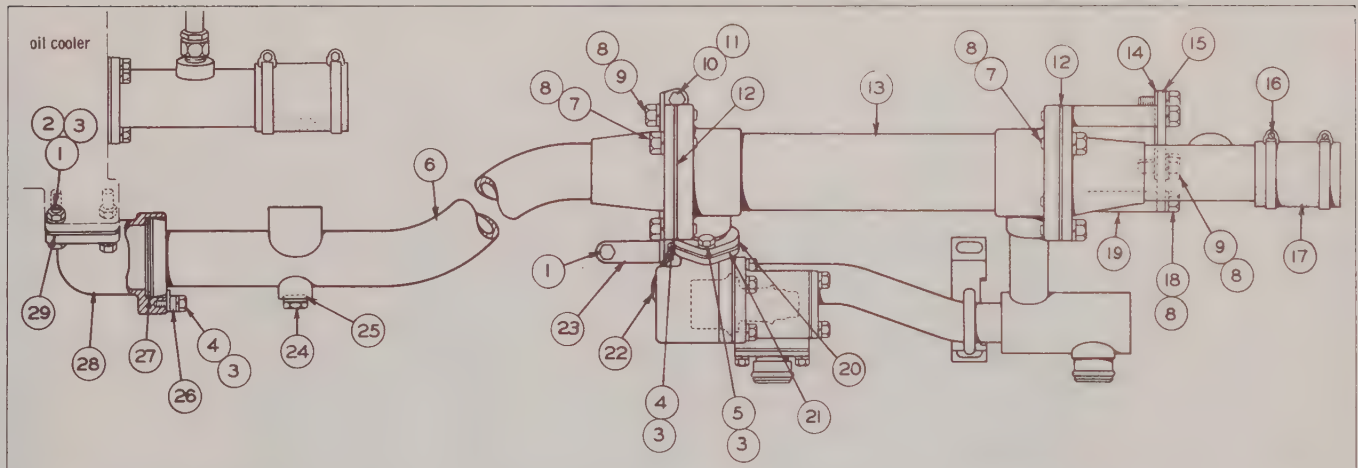
		Consists of:	Page
1	2P1780	Turbocharger Group	100-3
	- or -		
1	6N9491	Turbocharger Group	100-5
	- or -		
1	8N2691	Turbocharger Group	100-5B
4	1A2029	Bolt--Support to Manifold	
1	2B3243	Clip--Turbocharger Supply Tube	
1	2B5803	Plug--Manifold	
4	3B4506	Lockwasher--3/8" --Support to Manifold	
12	3B4508	Lockwasher--1/2" --Manifold to Head	
1	4B9302	Clip--Valve Tube	
1	6B9186	Gasket--Plug to Manifold	
24	3D490	Stud--Cylinder Head	
1	4H945	Fitting--Tube to Manifold	
1	4H1966	Fitting--To Water Pump	
3	3J5389	Plug--Manifold	
1	1L477	Fitting--To Manifold	
1	4L9568	Support--Air Cleaner	
1	5L1198	Tube--Fitting to Fitting	
6	5L4940	Gasket--Manifold to Head	
1	7L2814	Tube Assembly--Turbocharger Drain	
1	7L2862	Tube--Valve to Turbocharger Supply	
1	8L8225	Tube Assembly--Turbocharger Supply	
1	7M7273	Gasket--Turbocharger	
12	8M2530	Bolt--Manifold to Head	
1	8M5900	Fitting--Tube to Tube	
1	9M105	Fitting--Tube to Valve	
24	2N2280	Nut--Manifold to Head	
1	2N7073	Manifold Assembly	
1	2N7769	Tube--Oil Cooler Vent	
1	4S5718	Clip--Valve Tube	

4N8293 CONVERSION ARRANGEMENT—Factory Arrangement
Serial No. 46B2437—Up
To Convert from Dry Exhaust Manifolds to Water Cooled Exhaust Manifolds

	Consists of:		Page
1	2P1780	Turbocharger Group	100-3
	- or -		
1	6N9491	Turbocharger Group	100-5
	- or -		
1	8N2691	Turbocharger Group	100-5B
4	1A2029	Bolt--Support to Manifold	
6	1A2029	Bolt--Adapter to Turbocharger Shield	
2	1A2029	Bolt--Turbocharger Shield to Manifold	
1	2B3243	Clip--Turbocharger Supply Tube	
1	2B5803	Plug--Manifold	
13	3B4504	Lockwasher--1/4"	
1	4B9302	Clip--Valve Tube	
1	6B9186	Gasket--Plug to Manifold	
1	7B7129	Gasket--Flange to Water Pump	
1	8B8817	Plug--Exhaust Elbow	
6	1D4717	Nut--Adapter to Turbocharger Shield	
2	1D4717	Nut--Turbocharger Shield to Manifold	
24	3D490	Stud--Cylinder Head	
1	1F6068	Fitting--Tube to Manifold	
	- or -		
1	9M6522	Connector--Tube to Manifold	
1	1F6492	Fitting--Tube to Water Pump	
	- or -		
1	9L5254	Elbow--Tube to Water Pump	
1	4H945	Fitting--Tube to Manifold	
1	9H6067	Seal--Oil Line to Elbow	
2	3J5389	Plug--Manifold	
2	6K8079	Connector	
1	4L9568	Support--Air Cleaner	
6	5L4940	Gasket--Manifold to Head	
1	5L7631	Clamp--Elbow to Adapter	
2	6L2960	Expander--Coupling	
2	6L2961	Ring--Coupling	
1	7L2814	Tube Assembly--Turbocharger Drain	
1	7L2862	Tube--Valve to Turbocharger Supply	
1	7L3181	Adapter--Elbow	
1	7L3182	Gasket--Adapter to Turbocharger Shield	
1	7L3183	Elbow--Exhaust	
1	7L8697	Coupling--Elbow to Turbocharger	
1	8L8225	Tube Assembly--Turbocharger Supply	
1	9L3624	Flange--Water Pump	

CONSISTS OF:

12	2M849	WASHER--MANIFOLD TO HEAD
24	2M849	WASHER--MANIFOLD TO HEAD
4	5M2894	WASHER--SUPPORT TO MANIFOLD
2	5M2894	WASHER--CLIPS TO SIDE COVER
2	5M2894	WASHER--BOLT TO FLANGE
6	5M2894	WASHER--NUT TO TURBOCHARGER SHIELD
2	5M2894	WASHER--NUT TO MANIFOLD
4	5M2894	WASHER--OIL LINES TO TURBOCHARGER
1	5M6213	PLUG--MANIFOLD
13	7M3510	WASHER
1	7M7273	GASKET--TURBOCHARGER
4	8M1659	STUD--MANIFOLD TO TURBOCHARGER
4	8M2296	NUT--MANIFOLD TO TURBOCHARGER
12	8M2530	BOLT--MANIFOLD TO HEAD
1	8M6900	FITTING
1	9M105	FITTING--TUBE TO VALVE
24	2N2280	NUT--MANIFOLD TO HEAD
1	2N4312	TURBOCHARGER SHIELD ASSEMBLY
1	2N4331	SHIELD--TURBOCHARGER
1	2N4730	TUBE--WATER PUMP TO TURBOCHARGER SHIELD
	- OR -	
1	6N6467	TUBE ASSEMBLY--SHIELD SUPPLY
		CONSISTING OF:
	2	5H273 SLEEVE
	2	5H275 NUT
	40 CM	5P81 TUBE
1	2N7073	MANIFOLD ASSEMBLY
1	2N7769	TUBE--OIL COOLER VENT
1	2N8018	SHIELD
1	2N8041	TUBE ASSEMBLY--MANIFOLD TO TURBOCHARGER SHIELD
1	3N1663	SHIELD
13	S1570	BOLT--1/4"
2	S1591	BOLT--FLANGE TO WATER PUMP
1	1S4810	GASKET--TURBOCHARGER OIL DRAIN
1	1S6595	GASKET--TURBOCHARGER OIL SUPPLY
1	4S5718	CLIP--VALVE TUBE



REF NO	PART NUMBER	DESCRIPTION	QTY
1	S-1591	BOLT	2
2	1D4717	NUT	1
3	3B4506	LOCKWASHER	9
4	1A2029	BOLT	5
5	S-1594	BOLT	3
6	6L5952	TUBE ASSEM. (33.78" Long Overall) (Ref. No. 28 to Ref. No. 13)	1
7	S-1595	BOLT	4
8	3B4508	LOCKWASHER	12
9	7B3235	BOLT	6
10	S-1825	BOLT	1

REF NO	PART NUMBER	DESCRIPTION	QTY
11	9F4976	LOCKWASHER	1
12	5H4038	GASKET	2
13	1S6762	CORE ASSEM.	1
14	5H4263	GASKET	1
15	6L5961	COVER	1
16	9M7959	CLAMP	2
17	6L3942	HOSE	1
18	1D4572	BOLT	2
19	6L5954	TUBE ASSEM. (10.50" Long Overall) (Oil Cooler Outlet)	1
20	6L5964	TUBE ASSEM. (Ref. No. 13 to Regulator Housing)	1

REF NO	PART NUMBER	DESCRIPTION	QTY
21	8M2331	GASKET	1
22	6L5827	GASKET	1
23	6L5973	BRACKET	1
24	7M5897	PLUG ASSEM.	2
25	2M9780	SEAL (Part of 7M5897 Plug Assem.)	1
26	1L9004	LUG ASSEM.	1
27	4L9564	SEAL	1
28	4L9869	ELBOW	1
29	1L8022	GASKET	1

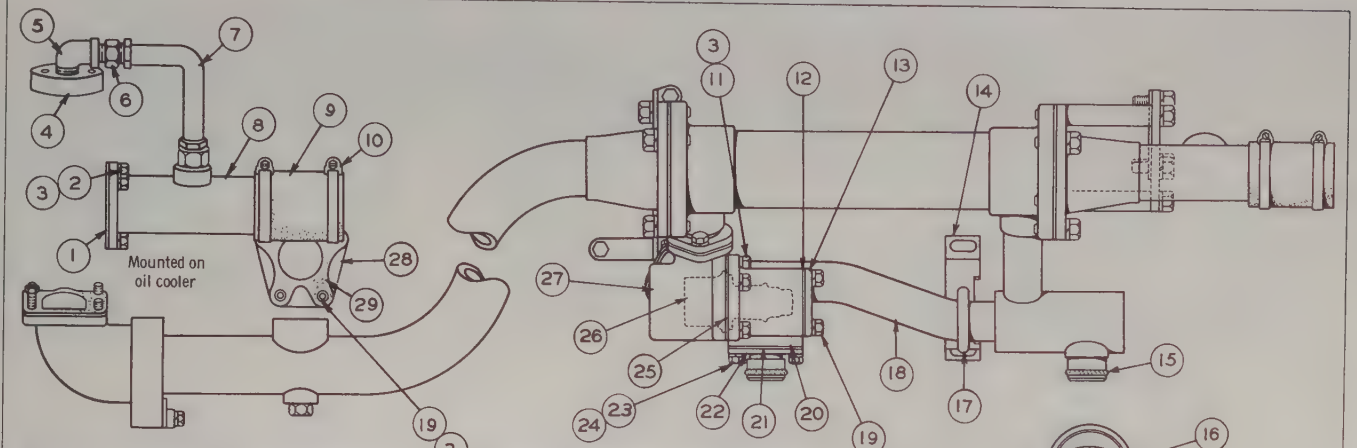
96259

6L5975 OIL COOLER LINES GROUP—Part 1
Serial No. 46B2437—Up
Part of 8L4221 Ebullient Cooling Conversion Arrangement listed on Page 100A

6L5975 OIL COOLER LINES GROUP—Part 2

Serial No. 46B2437—Up

Part of 8L4221 Ebullient Cooling Conversion Arrangement listed on Page 100A

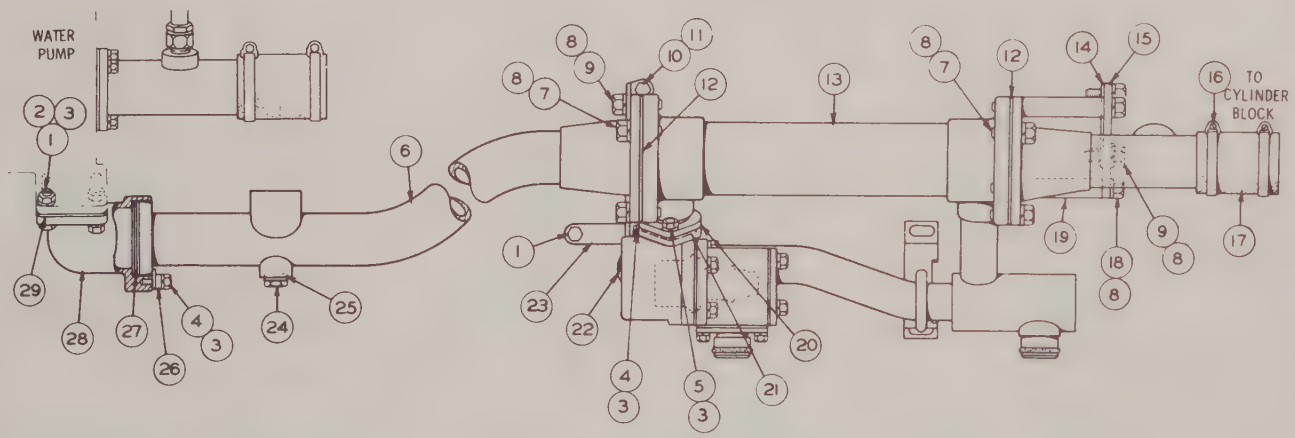


REF NO	PART NUMBER	DESCRIPTION	QTY.
1	5L1150	GASKET	1
2	1A2029	BOLT	4
3	3B4506	LOCKWASHER	14
4	1L1964	FLANGE	1
5	3B6554	ELBOW	1
6	9M7012	FITTING	2
	8F9335	NUT (1 in each 9M7012 Fitting)	2
7	7L2907	TUBE—(7.66" Long) (Water Pump Bypass)	1
8	6L5957	TUBE ASSEM.—(7.50" Long Overall)—(Water Pump Inlet)	1
9	6L3942	HOSE	1
10	9M7959	CLAMP	2

REF. NO.	PART NUMBER	DESCRIPTION	QTY
11	S-1588	BOLT	4
12	6L5827	GASKET	1
13	5L7483	COVER	1
14	6L6042	BRACKET	1
15	9M7002	SEAL	4
16	6L5850	GAUGE-(Oil Temperature Shut-Off)	1
	7B7376	CLIP	1
17	1B4204	NUT	2
	3B4507	LOCKWASHER	2
18	6L5974	TUBE ASSEM. (Oil Filter to Ref. No. 27)	1
19	S-1594	BOLT	6
20	6L5816	HOUSING	1
21	6L5828	GASKET	1

REF NO	PART NUMBER	DESCRIPTION	QTY
22	6L5967	TUBE ASSEM. (Ref. No. 20 to Oil Filter)	1
23	S-1618	BOLT	2
24	3B4505	LOCKWASHER	2
25	6L5829	GASKET	1
26	4L7615	REGULATOR	1
27	6L5738	HOUSING	1
28	7H7075	COVER	1
29	7H1662	GASKET	1

122624



REF. NO	PART NUMBER	DESCRIPTION	QTY
1	S1591	BOLT	2
2	1D4717	NUT	1
3	3B4506	LOCKWASHER	9
4	1A2029	BOLT	5
5	S1594	BOLT	3
6	6L5952	TUBE ASSEM.	1
7	S1595	BOLT	4
8	3B4508	LOCKWASHER	12
9	7B3235	BOLT	6
10	S1825	BOLT	1
11	9F4976	LOCKWASHER	1
12	5H4038	GASKET	2
13	1S6762	CORE ASSEM.	1
14	5H4263	GASKET	1
15	6L5961	COVER	1
16	9M7959	CLAMP	2
17	6L3942	HOSE	1
18	1D4572	BOLT	2
19	6L5954	TUBE ASSEM.	1
20	6L5964	TUBE ASSEM.	1
C 21	3P651	SEAL	1
22	6L5827	GASKET	1
23	6L5973	BRACKET	1
C 24	9S4190	PLUG	1
25	2M9780	SEAL	1
26	1L9004	LUG ASSEM.	1
27	4L9564	SEAL	1
28	4L9869	ELBOW	1
29	1L8022	GASKET	1

C INDICATES CHANGE

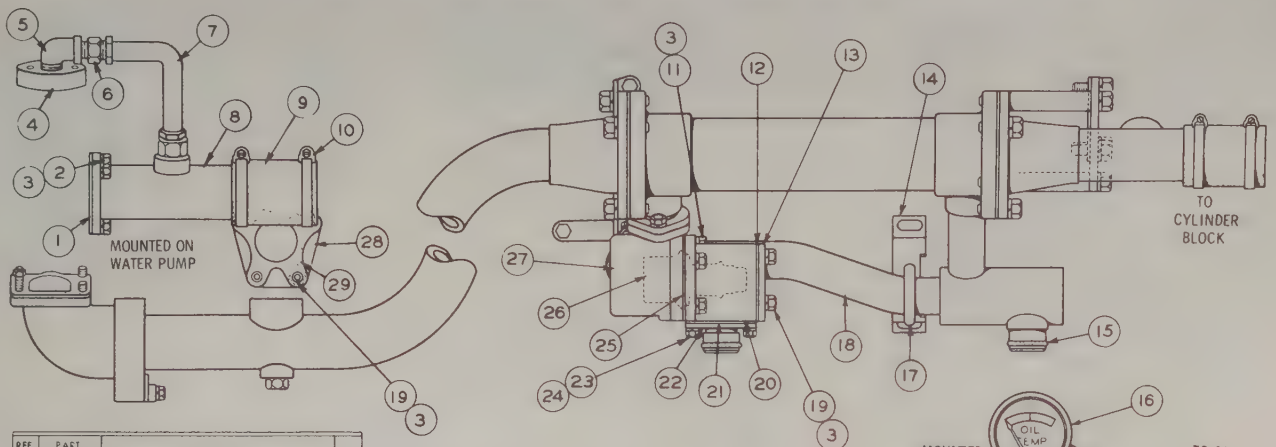
206146

6L5975 OIL COOLER LINES GROUP—Part 1—Type 2
Serial No. 46B2437—Up
Part of 8L4221 Ebullient Cooling Conversion listed on Page 100A

6L5975 OIL COOLER LINES GROUP—Part 2—Type 2

Serial No. 46B2437—Up

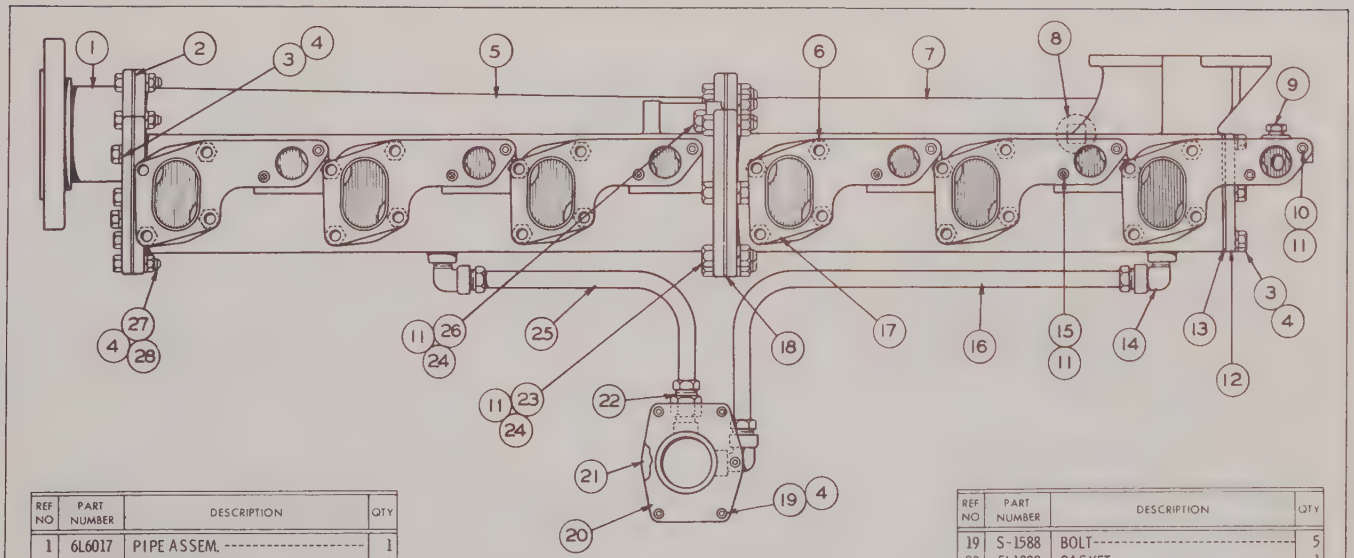
Part of 8L4221 Ebullient Cooling Conversion Arrangement listed on Page 100A



REF NO	PART NUMBER	DESCRIPTION	QTY
1	5L1150	GASKET	1
2	1A2029	BOLT	4
3	3B4506	LOCKWASHER	14
4	1L1964	FLANGE	1
5	3B6554	ELBOW	1
6	9M7012	FITTING	2
	8F9335	NUT (1 in each 9M7012 Fitting)	2
7	7L2907	TUBE (Water Pump Bypass)	1
8	6L5957	TUBE ASSEM. (Water Pump Inlet)	1
9	6L3942	HOSE	1
10	9M7959	CLAMP	2
11	S1588	BOLT	4
12	6L5827	GASKET	1
13	5L7483	COVER	1
14	6L6042	BRACKET	1
15	9M7002	SEAL	4
16	6L5850	GAUGE-(Oil Temperature Shut-Off)	1
	7B7376	CLIP	1
17	1B4204	NUT	2
	3B4507	LOCKWASHER	2
18	6L5974	TUBE ASSEM. (To Oil Cooler - Inlet)	1
19	S1594	BOLT	6
20	6L5816	HOUSING	1
21	6L5828	GASKET	1
22	6L5967	TUBE ASSEM. (To Oil Cooler - Outlet)	1
23	S1618	BOLT	2
24	3B4505	LOCKWASHER	2
25	6L5829	GASKET	1
26	4L7615	REGULATOR	1
C 27	3N9581	HOUSING	1
28	7H7075	COVER	1
29	7H1662	GASKET	1

C INDICATES CHANGE

206147



REF NO	PART NUMBER	DESCRIPTION	QTY
1	6L6017	PIPE ASSEM.	1
2	6L6016	GASKET	1
3	1A2029	BOLT	10
4	3B4506	LOCKWASHER	22
5	6L5936	MANIFOLD-------(Front)--------	1
6	1B5357	NUT	23
7	6L5937	MANIFOLD---------(Rear)--------	1
8	7B9665	PLUG	6
9	3J5389	PLUG	2
10	S-1595	BOLT	7
11	3B4508	LOCKWASHER	22
12	5L3511	COVER	1
13	5L3713	GASKET	1

REF NO	PART NUMBER	DESCRIPTION	QTY
14	1H4558	FITTING	3
	8F8999	NUT	3
		(1 in each 1H4558 Fitting)	
15	6H1717	BOLT	5
16	6L6045	TUBE---------(26.55" Long)-------	1
		(Ref. No. 7 to Ref. No. 21)	
17	5L4940	GASKET	6
18	6L6015	GASKET	1

REF NO	PART NUMBER	DESCRIPTION	QTY
19	S-1588	BOLT	5
20	5L1908	GASKET	1
21	6L5960	PIPE ASSEM.	1
22	6L6039	FITTING	1
	8F8999	NUT	1
		(Part of 6L6039 Fitting)	
23	S-1587	BOLT	9
24	1D4719	NUT	10
25	6L6046	TUBE--------(16.17" Long)--------	1
		(Ref. No. 5 to Ref. No. 21)	
26	1A1460	BOLT	1
27	S-1591	BOLT	7
28	1D4717	NUT	7

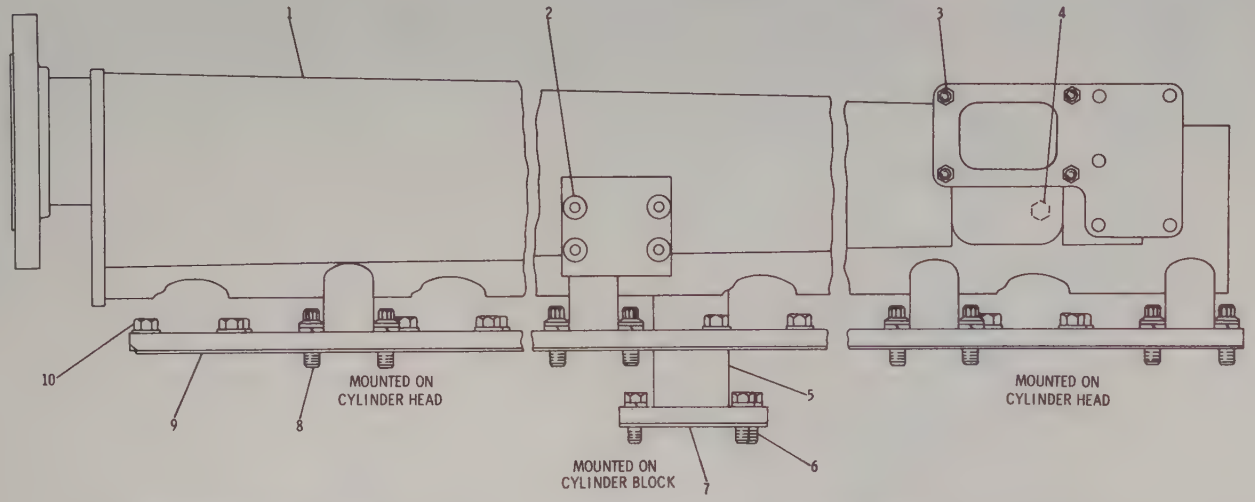
93956

6L6007 MANIFOLD GROUP

Part of 8L4221 Ebullient Cooling Conversion Arrangement listed on Page 100A

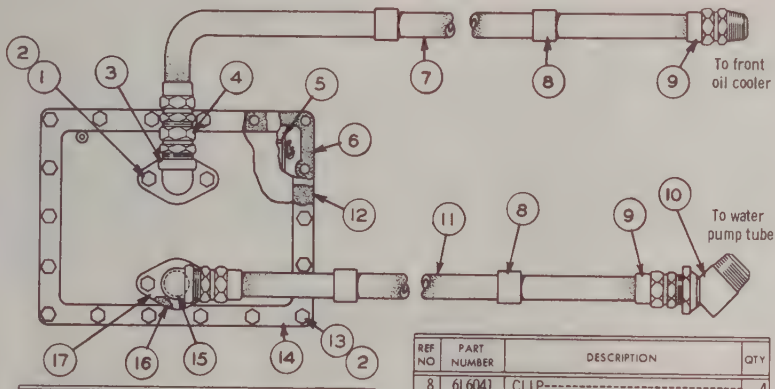
3N2917 MANIFOLD GROUP

Part of 8L4221 Ebullient Cooling Conversion Arrangement listed on Page 100-5



REF. NO.	PART NUMBER	DESCRIPTION	QTY
1	3N2873	MANIFOLD ASSEM.	1
2	5B9627	WASHER	4
3	8M1659	STUD	4
	8M2296	NUT	4
4	5M6213	PLUG	2
5	3N2916	PIPE ASSEM.	1
6	3B1915	BOLT	5
	3B4506	LOCKWASHER	5
7	5L1908	GASKET	1
8	8M2530	BOLT	12
	3B4508	LOCKWASHER	12
9	5L4940	GASKET	6
10	2N2280	NUT	24

155325



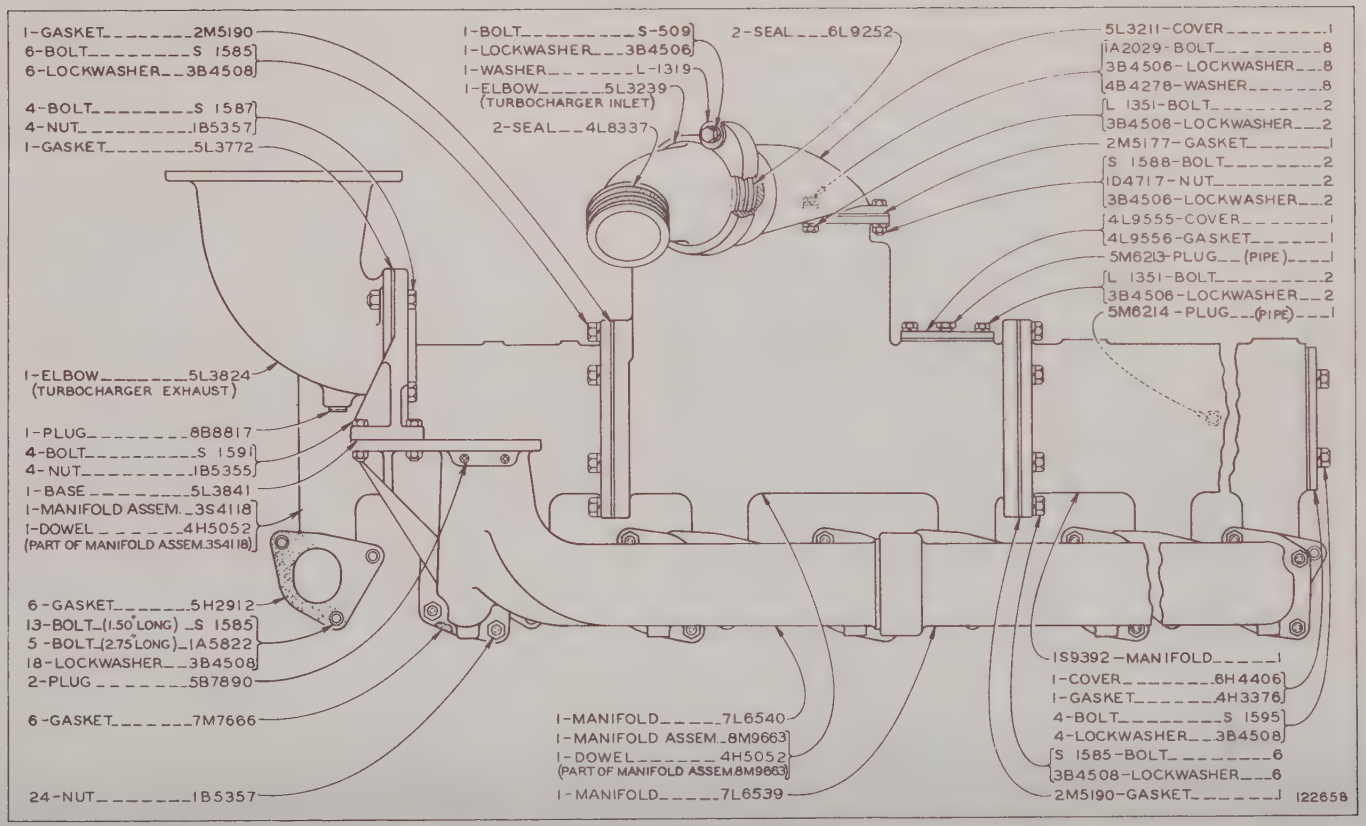
REF NO	PART NUMBER	DESCRIPTION	QTY
1	3B1915	BOLT	4
2	3B4506	LOCKWASHER	22
3	6L4382	ELBOW	2
4	1L1722	UNION	1
5	5L2498	CORE ASSEM.	1
6	7M875	GASKET (Core Assem. to Housing)	1
7	5L1391	HOSE---(54" Long-Water Outlet)---	1

REF NO	PART NUMBER	DESCRIPTION	QTY
8	6L6041	CLIP	4
9	1L767	COUPLING	4
10	6L5955	UNION	1
11	5L1392	HOSE----(68" Long-Water Inlet)---	1
12	7M879	GASKET (Cover to Core Assem.)	1
13	S1588	BOLT	18
14	5L7389	COVER	1
15	3B7750	NIPPLE	2
16	6L4435	GASKET	2
17	2L7048	FLANGE	2

122625

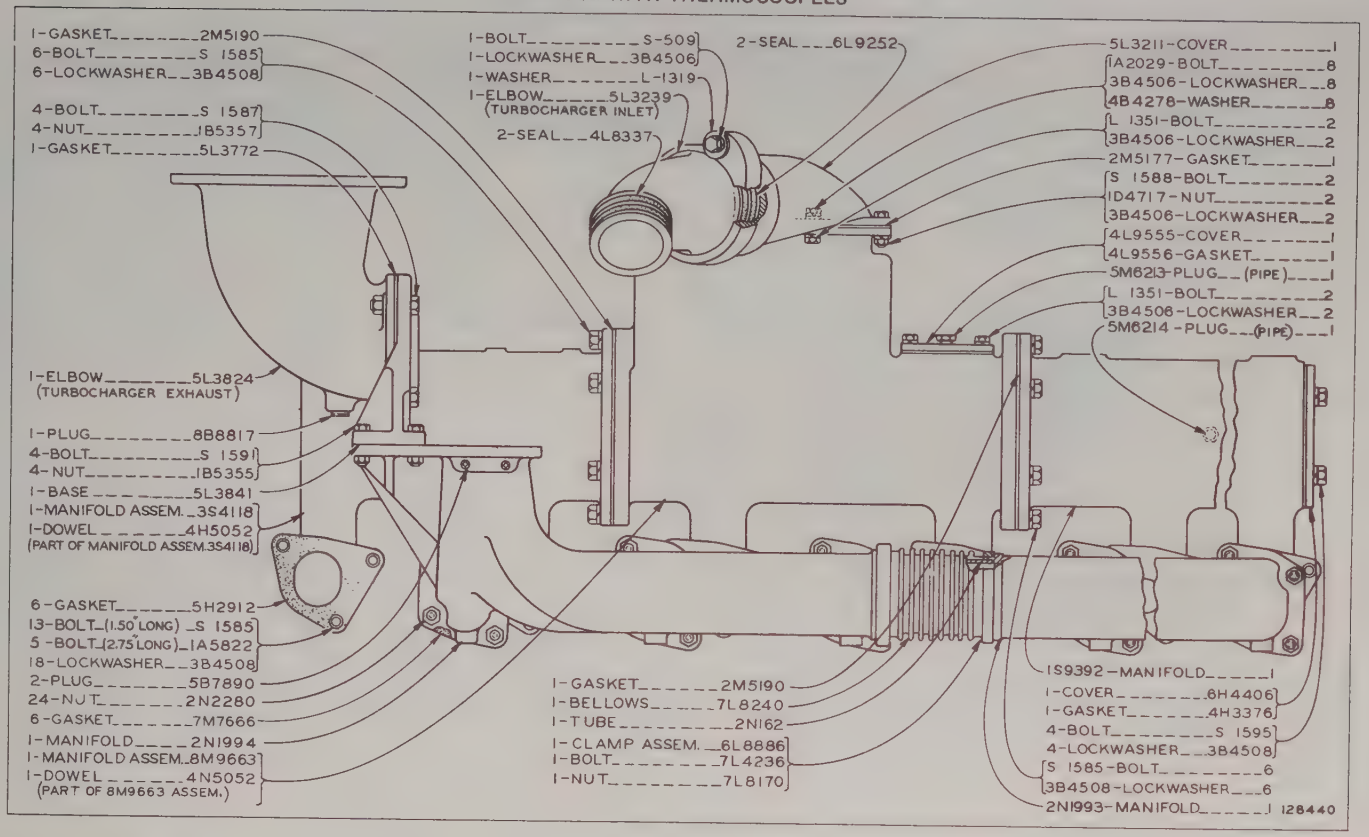
8L4192 AFTERCOOLER WATER LINES GROUP

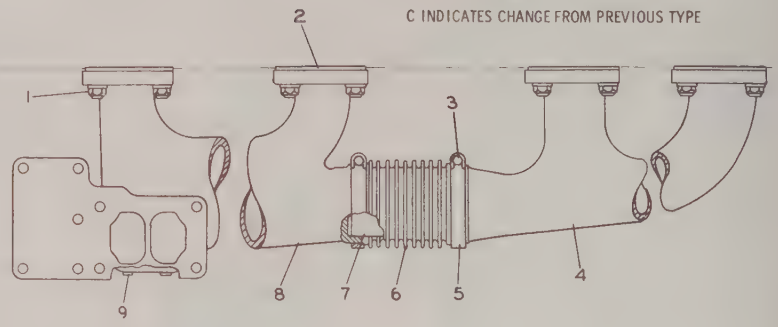
Part of 8L4221 Ebullient Cooling Conversion Arrangement listed on Page 100A



7L6835 MANIFOLD GROUP
FOR USE WITH THERMOCOUPLES

7L6835 MANIFOLD GROUP—Type 2
FOR USE WITH THERMOCOUPLES

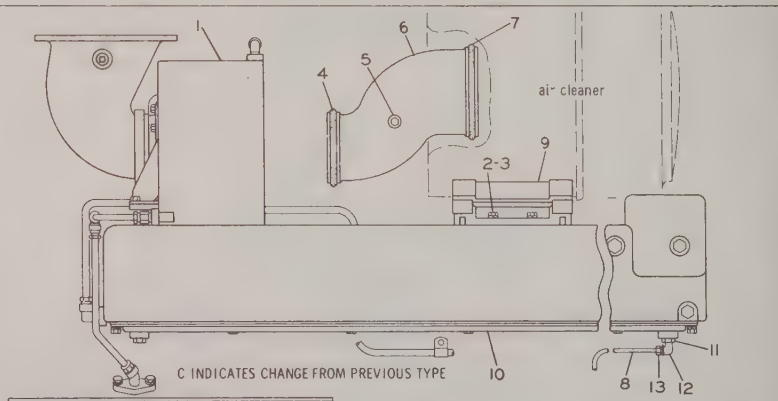




REF. NO.	PART NUMBER	DESCRIPTION	QTY
1	2N2280	NUT	24
2	7M7666	GASKET	6
3	7L4236	BOLT	2
	7L8170	NUT	2
4	2N1993	MANIFOLD	1
5	6L8886	CLAMP ASSEM.	2
6	7L8240	BELLOWS	1
7	2N162	TUBE	1
8	2N1994	MANIFOLD	1
C 9	4L2768	PLUG	2

128441

7L6835 MANIFOLD GROUP—Type 3
FOR USE WITH THERMOCOUPLES



REF. NO.	PART NUMBER	DESCRIPTION	QTY
1	7L2286	SHIELD GROUP--(Turbocharger) (See Separate Illustration)	1
C 2	1A2029	BOLT	4
C 3	3B4506	LOCKWASHER	4
4	2M5173	SEAL	1
5	5M6214	PLUG	1
6	7L8699	ADAPTER	1
7	5L5032	SEAL	1
8	8L6201	TUBE--(Vent)	1
9	4L9568	SUPPORT	1
10	6L9929	MANIFOLD GROUP (See Separate Illustration)	1
11	6B5072	BUSHING	1
12	1L477	FITTING	1
13	4H2495	NUT	1
	4H2494	SLEEVE (Parts of 1L477 Fitting)	1

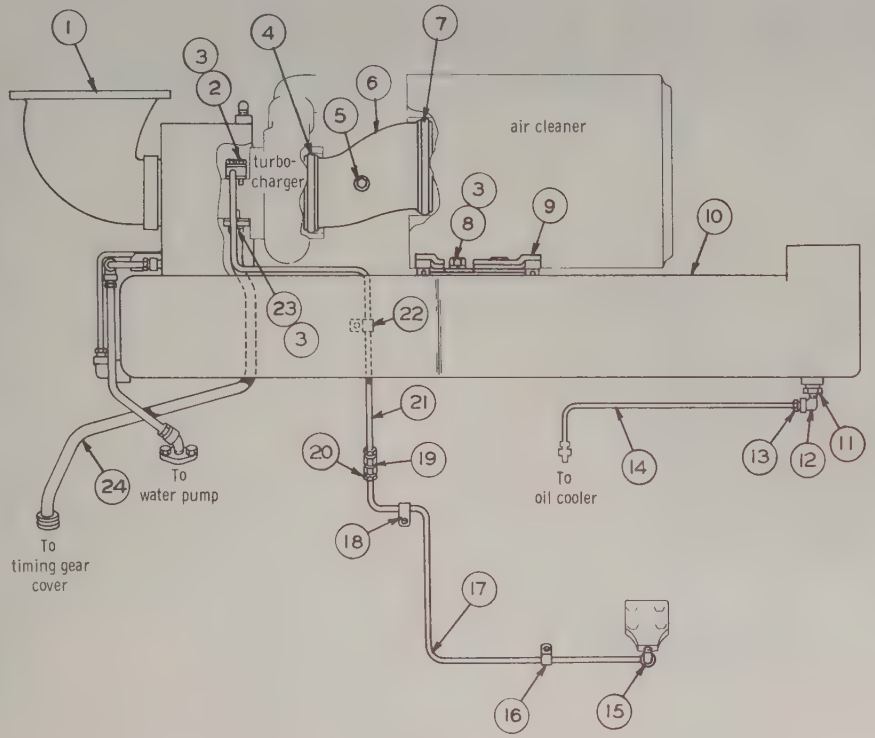
128014

7L8700 WATER SHIELDED MANIFOLD GROUP—Type 2
Serial No. 46B2437—Up. 6L9929 Manifold and 7L2286 Shield parts are shown on Pages 100H through 100J. Only separate parts serviced. When complete Group is required order 8L3417 shown on Page 100G-1

7L8700 WATER SHIELDED MANIFOLD GROUP

Effective with Serial No. 46B2437

6L9929 Manifold and 7L2286 Shield Group parts are shown on Pages 100H and 100J



REF NO	PART NUMBER	DESCRIPTION	QTY
1	7L2286	SHIELD GROUP--(Turbocharger)--- (See Separate Illustration)	1
2	S1571	BOLT----------	2
3	3B4506	LOCKWASHER----------	8
4	2M5173	SEAL----------	1
5	5M6214	PLUG----------	1
6	7L8699	ADAPTER----------	1
7	5L5032	SEAL----------	1
8	1A2029	BOLT----------	4
9	4L9568	SUPPORT----------	1
10	6L9929	MANIFOLD GROUP---------- (See Separate Illustration)	1
11	6B5072	BUSHING----------	1
12	1L477	FITTING----------	1
13	4H2495	NUT----------	1
	4H2494	SLEEVE---------- (Parts of 1L477 Fitting)	1
14	8L6201	TUBE----------(Vent)----------	1
15	9M105	FITTING----------	1
	8F9362	NUT---------- (Part of 9M105 Fitting)	1
16	4B9302	CLIP----------	1
17	7L2862	TUBE---------(Oil Supply)--------	1
18	4S5718	CLIP----------	1
19	8M5900	FITTING----------	1
20	8F9362	NUT---------- (Part of 8M5900 Fitting)	2
21	8L8225	TUBE ASSEM. -----(Oil Supply)----	1
22	2B3243	CLIP----------	1
23	S1594	BOLT----------	2
24	7L2814	TUBE ASSEM. -----(Oil Drain)-----	1

122620

		Consists of:	Page
1	8L3412	Oil Lines Group	100Q
	- or -		
1	3N4191	Oil Lines Group	100R
1	8L3529	Turbocharger & Manifold Shield Group	100K
1	2N6455	Water Lines Group	100P
2	3B4506	Lockwasher--3/8"	
1	7B7129	Gasket--Flange to Water Pump	
1	5L5032	Seal--Flange to Air Cleaner	
1	6L3478	Adapter--Air Cleaner to Turbocharger	
1	9L3624	Flange--Water Pump Outlet	
1	2M5173	Seal--Flange to Turbocharger	
2	S1591	Bolt--Flange to Water Pump	

8L3417 MANIFOLD AND TURBOCHARGER SHIELD GROUP—Field Installation
Serial No. 46B2437—Up

		Consists of:	Page
1	8L3412	Oil Lines Group	100Q
1	2N6295	Turbocharger & Manifold Shield Group	100M
1	2N6684	Air Cleaner Group	100S
1	7B7129	Gasket	
1	9L3624	Flange	
2	S1591	Bolt	

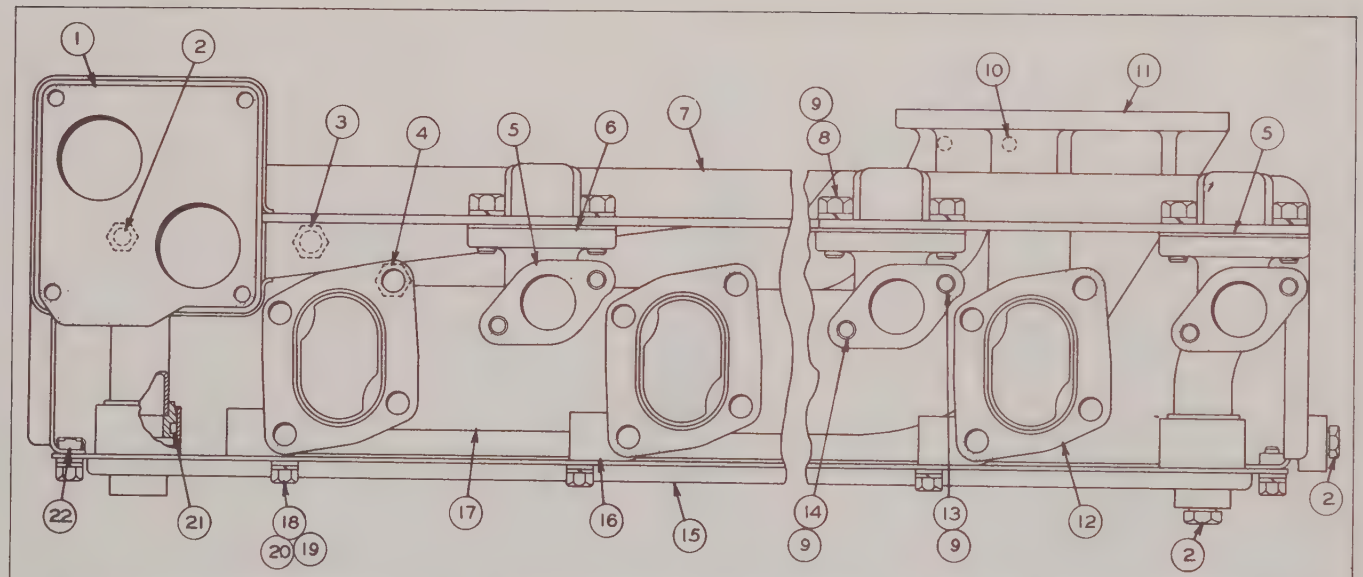
2N6692 MANIFOLD AND TURBOCHARGER SHIELD ARRANGEMENT—Type 1
Serial No. 46B2437—Up

		Consists of:	Page
1	2N6295	Turbocharger & Manifold Shield Group	100M
	- or -		
1	6N6631	Turbocharger & Manifold Shield Group	100L-2
1	2N6684	Air Cleaner Group	100S
1	9L3624	Flange--Water Pump Outlet	
2	S1591	Bolt--Flange to Water Pump	
1	7B7129	Gasket--Flange to Water Pump	

2N6692 MANIFOLD AND TURBOCHARGER SHIELD ARRANGEMENT—Type 2
Serial No. 46B2437—Up

		Consists of:	Page
1	6L4231	Turbocharger Group	104
1	2N6684	Air Cleaner Group	100S
1	3N8997	Turbocharger Shield Group	100N-1
	- or -		
1	6N6649	Turbocharger Shield Group	100N-1A
1	3N8998	Manifold Shield Group	100N-2

3N9077 WATER SHIELDED MANIFOLD ARRANGEMENT
Factory Installation
Serial No. 46B2437—Up



REF NO	PART NUMBER	DESCRIPTION	QTY
1	5L1687	GASKET	1
2	3J5389	PLUG	4
3	2B5803	PLUG	1
	5B2151	GASKET	1
4	1B5357	NUT	24
5	2H7594	GASKET	12
6	7L1	ELBOW	6
7	6L9923	SHIELD ASSEM.	1

REF NO	PART NUMBER	DESCRIPTION	QTY
8	6H1717	BOLT	12
9	3B4508	LOCKWASHER	24
10	4L2768	PLUG	2
11	5L3340	MANIFOLD (Rear)	1
12	7M7666	GASKET	6
13	S-1587	BOLT (1.75" Long)	6
14	S-1595	BOLT (1.25" Long)	6
15	6L9927	SHIELD ASSEM.	1

REF NO	PART NUMBER	DESCRIPTION	QTY
16	6L9928	CLIP	6
17	5L3364	MANIFOLD (Front)	1
18	L-1351	BOLT	15
19	3B4506	LOCKWASHER	15
20	4B4278	WASHER	15
21	2H3927	SEAL	2
22	7L6025	NUT AND RETAINER ASSEM.	9

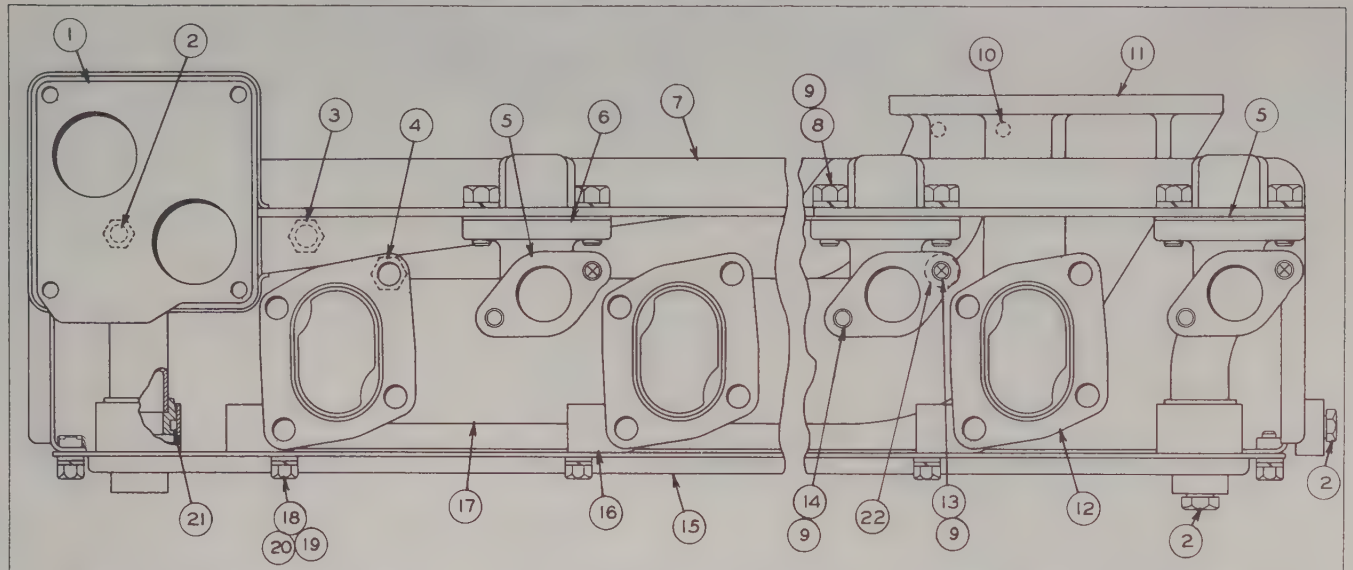
122616

6L9929 WATER SHIELDED MANIFOLD GROUP

Part of 7L8700 Water Shielded Manifold Group shown on Page 100G

6L9929 WATER SHIELDED MANIFOLD GROUP—Type 2

Part of 7L8700 Water Shielded Manifold Group shown on Pages 100F-1 and 100G



REF NO	PART NUMBER	DESCRIPTION	QTY
1	5L1687	GASKET	1
2	3J5389	PLUG	4
3	2B5803	PLUG	1
	5B2151	GASKET	1
4	1B5357	NUT	24
5	2H7594	GASKET	12
6	7L1	ELBOW	6
7	1N5792	SHIELD ASSEM.	1

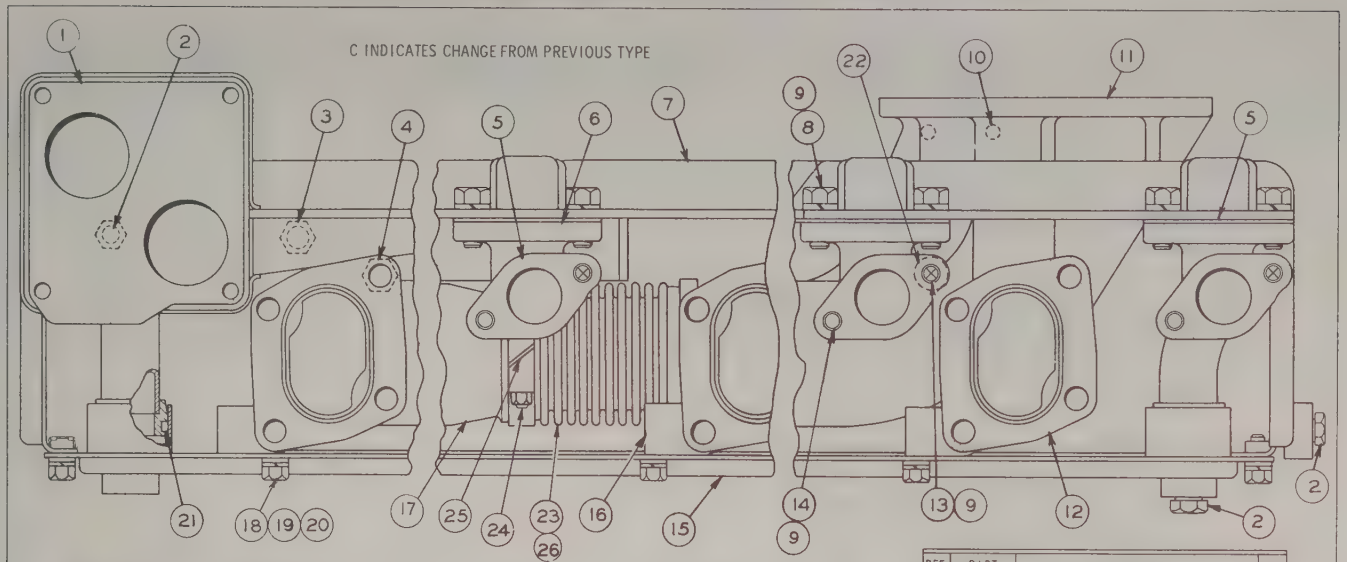
REF NO	PART NUMBER	DESCRIPTION	QTY
8	6H1717	BOLT	12
9	3B4508	LOCKWASHER	24
10	4L2768	PLUG	2
11	2N770	MANIFOLD (Rear)	1
12	7M7666	GASKET	6
13	2B947	BOLT (Marked X)	6
14	S1585	BOLT	6
15	1N5793	SHIELD ASSEM.	1

REF NO	PART NUMBER	DESCRIPTION	QTY
16	6L9928	CLIP	6
17	2N769	MANIFOLD (Front)	1
18	L 1351	BOLT	15
19	3B4506	LOCKWASHER	15
20	4B4278	WASHER	15
21	2H3927	SEAL	2
22	2J8239	ADAPTER	6

124591

6L9929 WATER SHIELDED MANIFOLD GROUP—Type 3

Part of 7L8700 Water Shielded Manifold Group shown on Pages 100F-1 and 100G

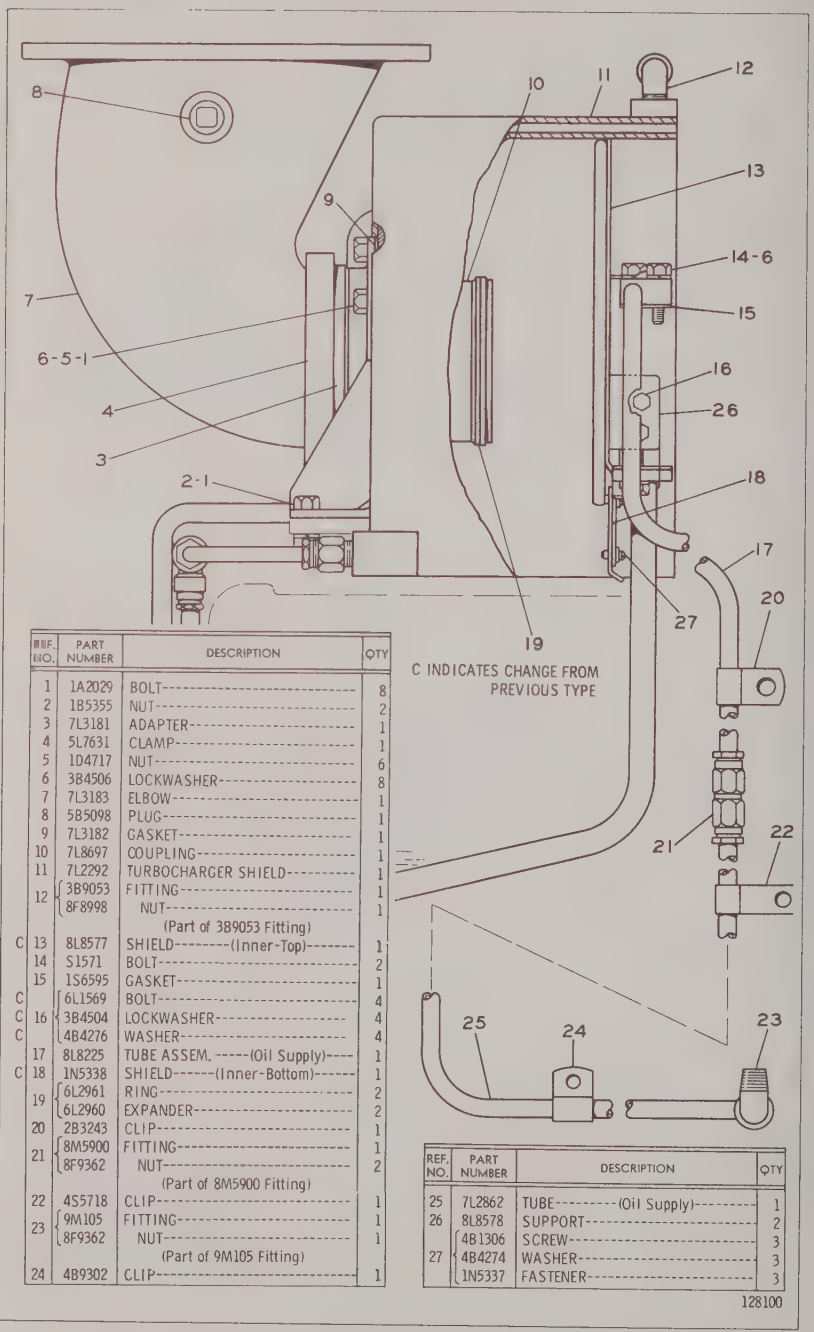


REF. NO.		PART NUMBER	DESCRIPTION	QTY
1		5L1687	GASKET	1
2		3J5389	PLUG	4
3		2B5803	PLUG	1
		5B2151	GASKET	1
C	4	2N2280	NUT	24
5		2H7594	GASKET	12
6		7L1	ELBOW	6
7		1N5792	SHIELD ASSEM.	1
8		6H1717	BOLT	12

REF. NO.		PART NUMBER	DESCRIPTION	QTY
9		3B4508	LOCKWASHER	24
10		4L2768	PLUG	2
C	11	1N9971	MANIFOLD—(Rear)	1
12		7M7666	GASKET	6
13		2B947	BOLT—(Marked X)	6
14		S1585	BOLT	6
15		1N5793	SHIELD ASSEM.	1
16		6L9928	CLIP	6
C	17	1N9972	MANIFOLD—(Front)	1

REF. NO.		PART NUMBER	DESCRIPTION	QTY
18		L1351	BOLT	15
19		3B4506	LOCKWASHER	15
20		4B4278	WASHER	15
21		2H3927	SEAL	2
22		2J8239	ADAPTER	6
C	23	7L8240	BELLOWS	1
C	24	7L4236	BOLT	2
		7L8170	NUT	2
C	25	6L8886	CLAMP ASSEM.	2
C	26	2N162	TUBE	1

126124



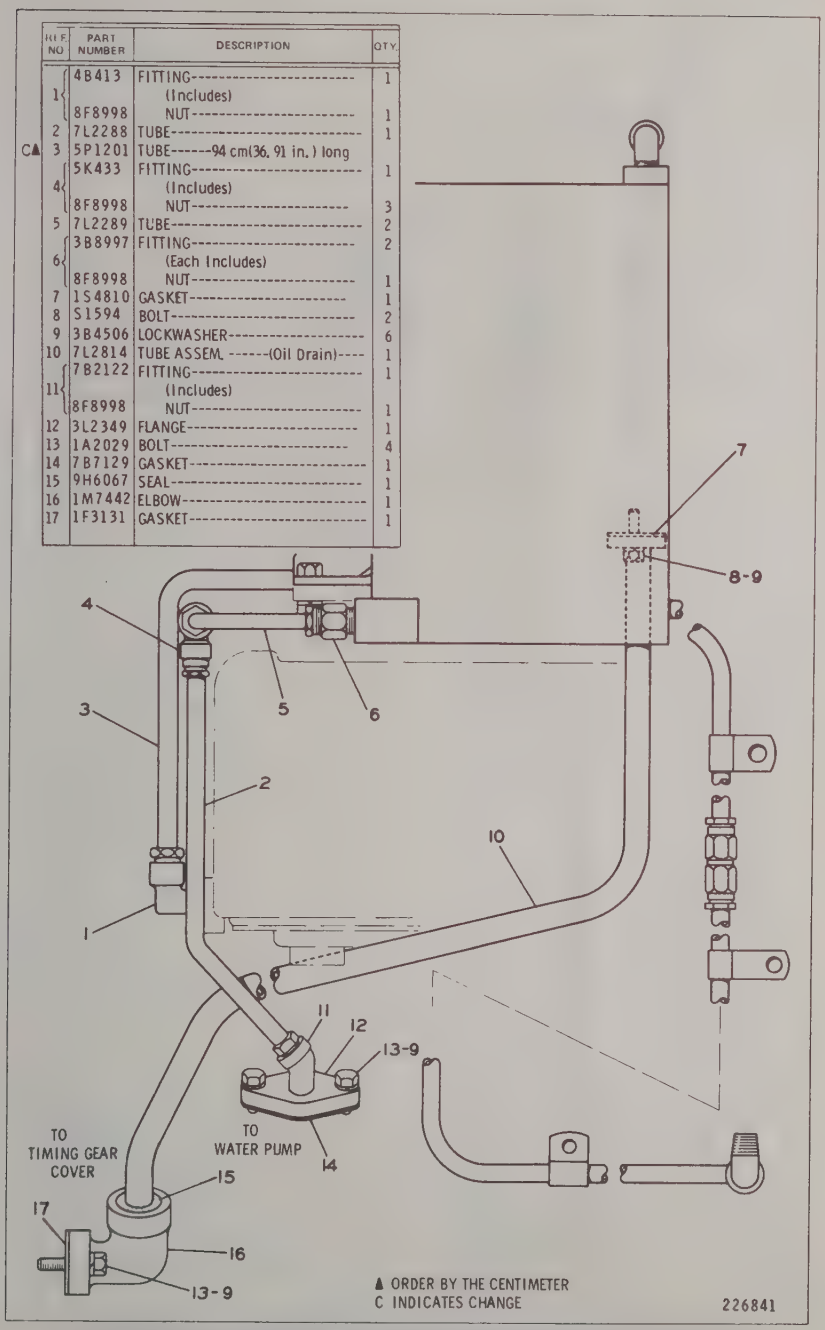
REF. NO.	PART NUMBER	DESCRIPTION	QTY
1	1A2029	BOLT	8
2	1B5355	NUT	2
3	7L3181	ADAPTER	1
4	5L7631	CLAMP	1
5	1D4717	NUT	6
6	3B4506	LOCKWASHER	8
7	7L3183	ELBOW	1
8	5B5098	PLUG	1
9	7L3182	GASKET	1
10	7L8697	COUPLING	1
11	7L2292	TURBOCHARGER SHIELD	1
12	3B9053	FITTING	1
	8F8998	NUT	1
		(Part of 3B9053 Fitting)	
C 13	8L8577	SHIELD--------(Inner-Top)-------	1
14	S1571	BOLT	2
15	1S6595	GASKET	1
C	6L1569	BOLT	4
C 16	3B4504	LOCKWASHER	4
C	4B4276	WASHER	4
17	8L8225	TUBE ASSEM. -----(Oil Supply)----	1
C 18	1N5338	SHIELD------(Inner-Bottom)------	1
19	6L2961	RING	2
	6L2960	EXPANDER	2
20	2B3243	CLIP	1
21	8M5900	FITTING	1
	8F9362	NUT	2
		(Part of 8M5900 Fitting)	
22	4S5718	CLIP	1
23	9M105	FITTING	1
	8F9362	NUT	1
		(Part of 9M105 Fitting)	
24	4B9302	CLIP	1

REF. NO.	PART NUMBER	DESCRIPTION	QTY
25	7L2862	TUBE---------(Oil Supply)---------	1
26	8L8578	SUPPORT	2
27	4B1306	SCREW	3
	4B4274	WASHER	3
	1N5337	FASTENER	3

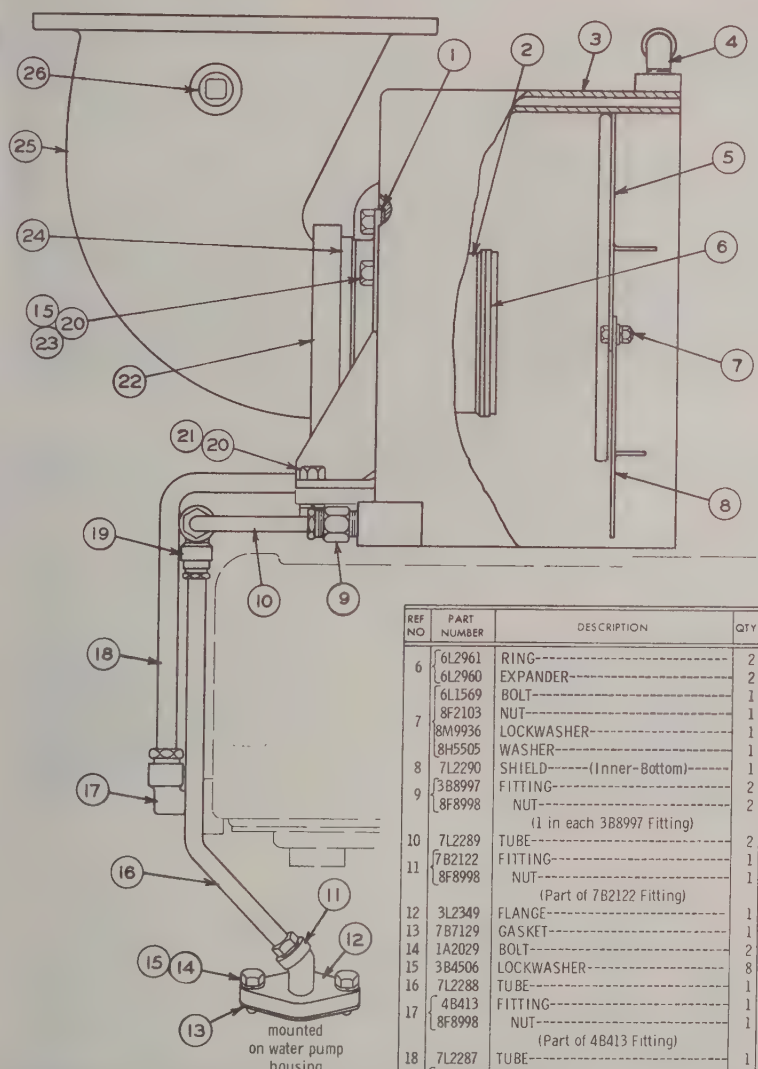
128100

7L2286 WATER COOLED TURBOCHARGER SHEILD GROUP—Part 1—Type 2
Part of 7L8700 Water Shielded Manifold Group shown on Page 100G

REF NO	PART NUMBER	DESCRIPTION	QTY.
1	4B413	FITTING---------- (Includes)	1
	8F8998	NUT----------	1
2	7L2288	TUBE----------	1
C▲ 3	5P1201	TUBE------94 cm(36. 91 in.) long	
4	5K433	FITTING---------- (Includes)	1
	8F8998	NUT----------	3
5	7L2289	TUBE----------	2
6	3B8997	FITTING---------- (Each Includes)	2
	8F8998	NUT----------	1
7	1S4810	GASKET----------	1
8	S1594	BOLT----------	2
9	3B4506	LOCKWASHER----------	6
10	7L2814	TUBE ASSEM. ------(Oil Drain)----	1
11	7B2122	FITTING---------- (Includes)	1
	8F8998	NUT----------	1
12	3L2349	FLANGE----------	1
13	1A2029	BOLT----------	4
14	7B7129	GASKET----------	1
15	9H6067	SEAL----------	1
16	1M7442	ELBOW----------	1
17	1F3131	GASKET----------	1



7L2286 WATER COOLED TURBOCHARGER SHIELD GROUP—Part 2—Type 2
Part of 7L8700 Water Shielded Manifold Group shown on Page 100G



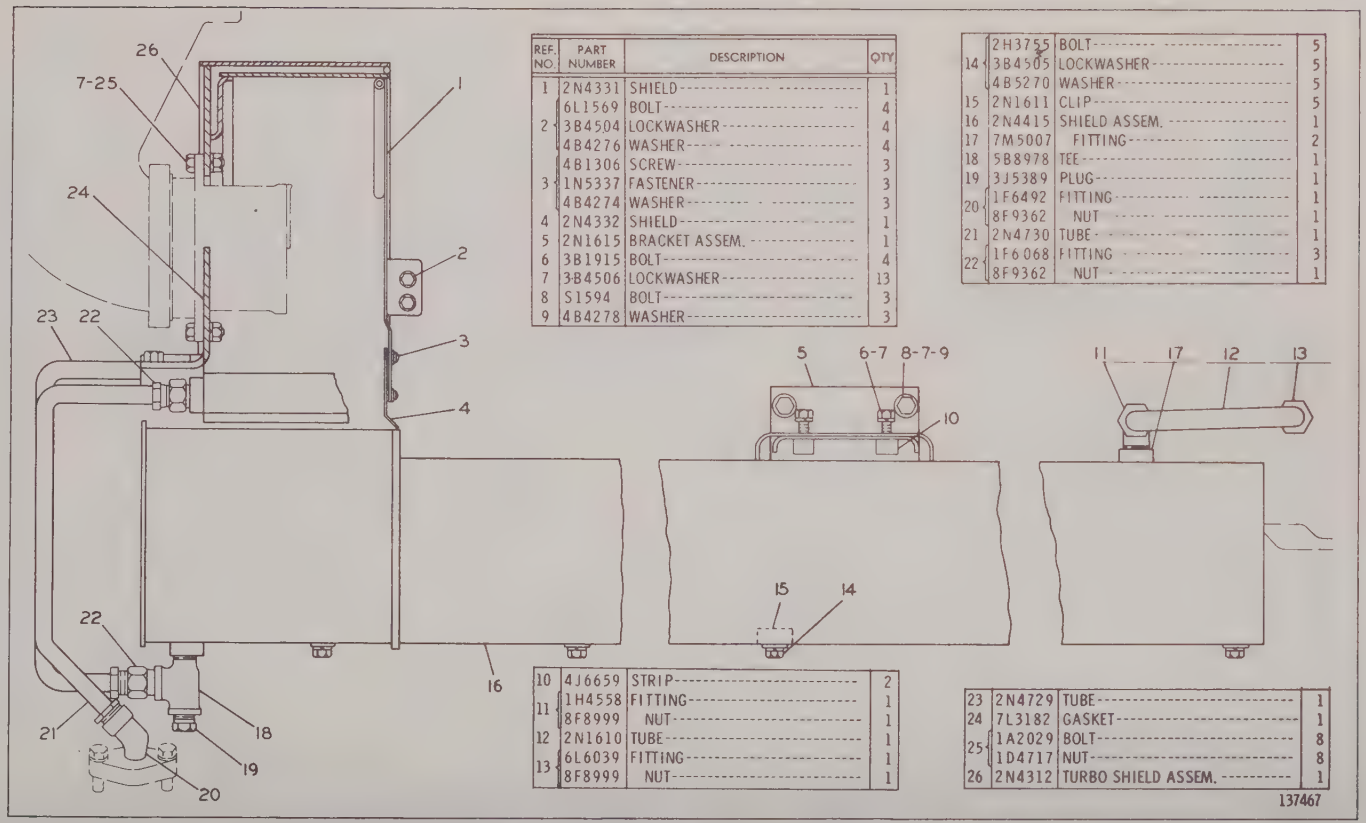
REF NO	PART NUMBER	DESCRIPTION	QTY
6	6L2961	RING	2
	6L2960	EXPANDER	2
7	6L1569	BOLT	1
	8F2103	NUT	1
	8M9936	LOCKWASHER	1
	8H5505	WASHER	1
8	7L2290	SHIELD------(Inner-Bottom)------	1
9	3B8997	FITTING	2
	8F8998	NUT	2
		(1 in each 3B8997 Fitting)	
10	7L2289	TUBE	2
11	7B2122	FITTING	1
	8F8998	NUT	1
		(Part of 7B2122 Fitting)	
12	3L2349	FLANGE	1
13	7B7129	GASKET	1
14	1A2029	BOLT	2
15	3B4506	LOCKWASHER	8
16	7L2288	TUBE	1
17	4B413	FITTING	1
	8F8998	NUT	1
		(Part of 4B413 Fitting)	
18	7L2287	TUBE	1
19	5K433	FITTING	1
	8F8998	NUT	3
		(Part of 5K433 Fitting)	
20	1A2029	BOLT	8
21	1B5355	NUT	2
22	5L7631	CLAMP	1
23	1D4717	NUT	6
24	7L3181	ADAPTER	1
25	7L3183	ELBOW	1
26	5B5098	PLUG	1

REF NO	PART NUMBER	DESCRIPTION	QTY
1	7L3182	GASKET	1
2	7L8697	COUPLING	1
3	7L2292	TURBO SHIELD	1
4	3B9053	FITTING	1
	8F8998	NUT	1
		(Part of 3B9053 Fitting)	
5	7L2291	SHIELD--------(Inner-Top)--------	1

122619

7L2286 WATER COOLED TURBOCHARGER SHIELD GROUP

Part of 7L8700 Water Shielded Manifold Group shown on Page 100G



REF. NO.	PART NUMBER	DESCRIPTION	QTY.
1	2N4331	SHIELD	1
2	6L1569	BOLT	4
	3B4504	LOCKWASHER	4
	4B4276	WASHER	4
3	4B1306	SCREW	3
	1N5337	FASTENER	3
	4B4274	WASHER	3
4	2N4332	SHIELD	1
5	2N1615	BRACKET ASSEM.	1
6	3B1915	BOLT	4
7	3B4506	LOCKWASHER	13
8	S1594	BOLT	3
9	4B4278	WASHER	3

14	2H3755	BOLT	5
	3B4505	LOCKWASHER	5
	4B5270	WASHER	5
15	2N1611	CLIP	5
16	2N4415	SHIELD ASSEM.	1
17	7M5007	FITTING	2
18	5B8978	TEE	1
19	3J5389	PLUG	1
20	1F6492	FITTING	1
	8F9362	NUT	1
21	2N4730	TUBE	1
22	1F6068	FITTING	3
	8F9362	NUT	1

10	4J6659	STRIP	2
11	1H4558	FITTING	1
	8F8999	NUT	1
12	2N1610	TUBE	1
13	6L6039	FITTING	1
	8F8999	NUT	1

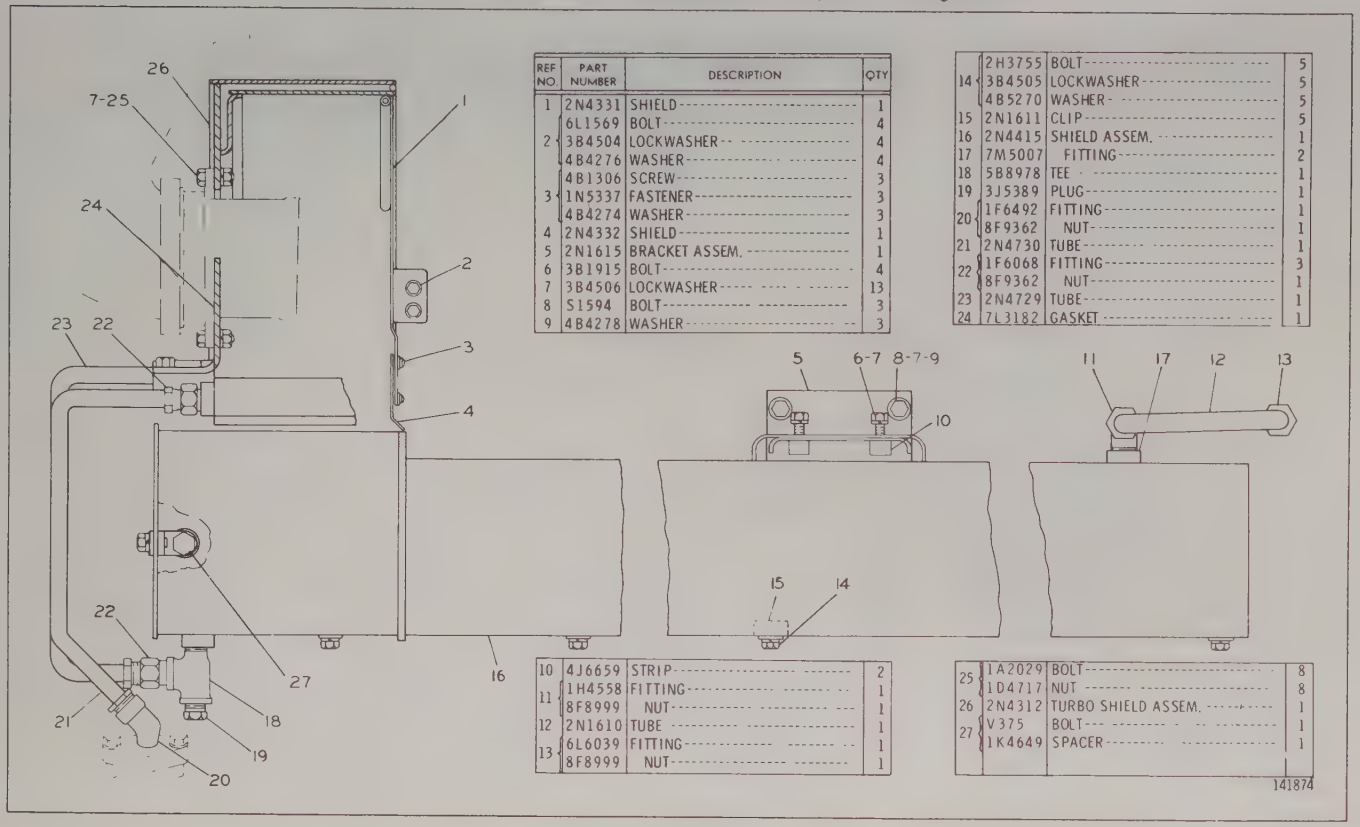
23	2N4729	TUBE	1
24	7L3182	GASKET	1
25	1A2029	BOLT	8
	1D4717	NUT	8
26	2N4312	TURBO SHIELD ASSEM.	1

8L3529 WATER SHIELDED TURBOCHARGER AND MANIFOLD SHIELD GROUP—Type 1

Part of 8L3417 Manifold and Turbocharger Shield Group listed on Page 100G-1

8L3529 WATER SHIELDED TURBOCHARGER AND MANIFOLD SHIELD GROUP–Type 2

Part of 8L3417 Manifold and Turbocharger Shield Group listed on Page 100G-1

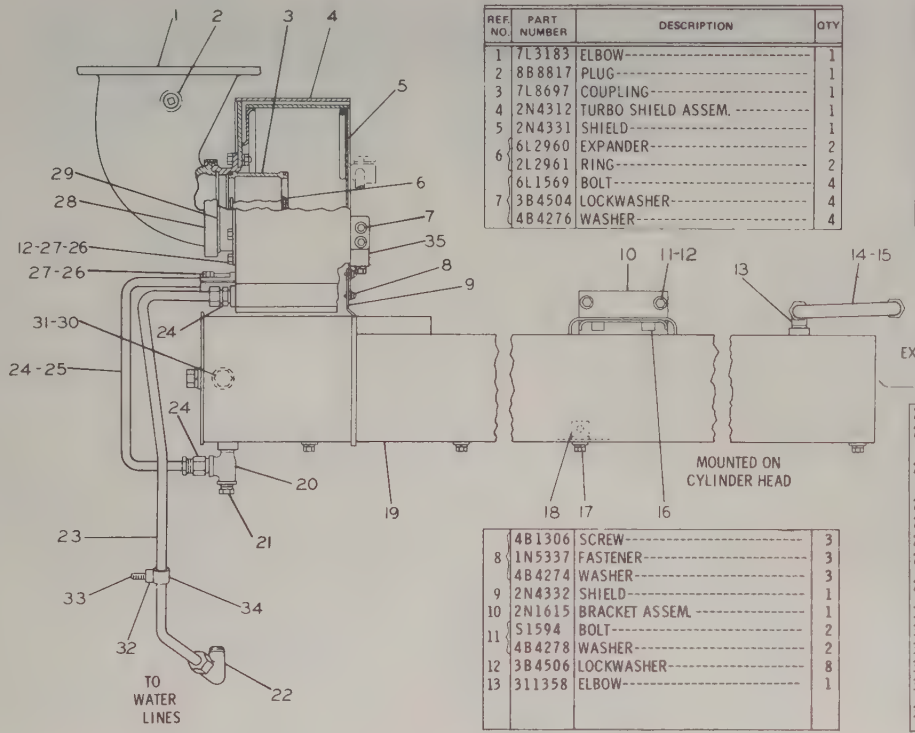


REF NO.	PART NUMBER	DESCRIPTION	QTY
1	2N4331	SHIELD	1
2	6L1569	BOLT	4
	3B4504	LOCKWASHER	4
	4B4276	WASHER	4
3	4B1306	SCREW	3
	1N5337	FASTENER	3
	4B4274	WASHER	3
4	2N4332	SHIELD	1
5	2N1615	BRACKET ASSEM.	1
6	3B1915	BOLT	4
7	3B4506	LOCKWASHER	13
8	S1594	BOLT	3
9	4B4278	WASHER	3

REF NO.	PART NUMBER	DESCRIPTION	QTY
14	2H3755	BOLT	5
	3B4505	LOCKWASHER	5
	4B5270	WASHER	5
15	2N1611	CLIP	5
16	2N4415	SHIELD ASSEM.	1
17	7M5007	FITTING	2
18	5B8978	TEE	1
19	3J5389	PLUG	1
20	1F6492	FITTING	1
	8F9362	NUT	1
21	2N4730	TUBE	1
22	1F6068	FITTING	3
	8F9362	NUT	1
23	2N4729	TUBE	1
24	7L3182	GASKET	1

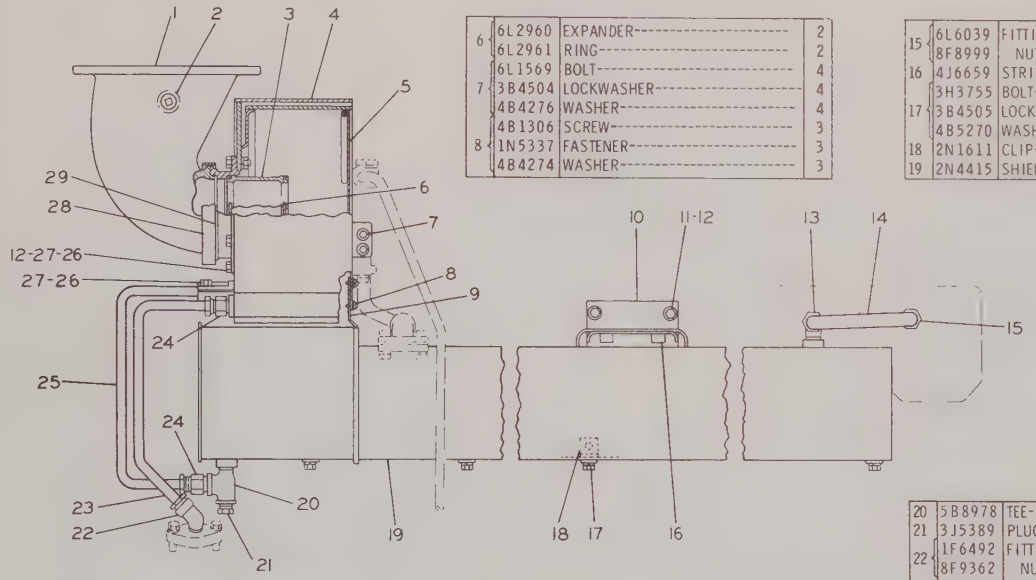
REF NO.	PART NUMBER	DESCRIPTION	QTY
10	4J6659	STRIP	2
11	1H4558	FITTING	1
	8F8999	NUT	1
12	2N1610	TUBE	1
13	6L6039	FITTING	1
	8F8999	NUT	1

REF NO.	PART NUMBER	DESCRIPTION	QTY
25	1A2029	BOLT	8
	1D4717	NUT	8
26	2N4312	TURBO SHIELD ASSEM.	1
27	V375	BOLT	1
	1K4649	SPACER	1



REF. NO.	PART NUMBER	DESCRIPTION	QTY
1	7L3183	ELBOW	1
2	8B8817	PLUG	1
3	7L8697	COUPLING	1
4	2N4312	TURBO SHIELD ASSEM.	1
5	2N4331	SHIELD	1
6	6L2960	EXPANDER	2
	2L2961	RING	2
7	6L1569	BOLT	4
	3B4504	LOCKWASHER	4
	4B4276	WASHER	4
8	4B1306	SCREW	3
	1N5337	FASTENER	3
	4B4274	WASHER	3
9	2N4332	SHIELD	1
10	2N1615	BRACKET ASSEM.	1
11	S1594	BOLT	2
	4B4278	WASHER	2
12	3B4506	LOCKWASHER	8
13	311358	ELBOW	1
14	6N9669	TUBE ASSEM.	1
15	308310	CONNECTOR	1
16	4J6659	STRIP	2
17	3H3755	BOLT	5
	3B4505	LOCKWASHER	5
	4B5270	WASHER	5
18	2N1611	CLIP	5
19	2N4415	SHIELD ASSEM.	1
20	5B8978	TEE	1
21	3J5389	PLUG	1
22	616717	ELBOW	1
23	6N2722	TUBE ASSEM.	1
24	9M6522	CONNECTOR (Each Includes)	3
	8F9362	NUT	1
25	6N6355	TUBE ASSEM.	1
26	1A2029	BOLT	8
27	1D4717	NUT	8
28	5L7631	CLAMP	1
29	7L3181	ADAPTER	1
	7L3182	GASKET	1
30	V375	BOLT	1
31	1K4649	SPACER	1
32	4S5719	SPACER	1
33	S1571	BOLT	1
34	2H1743	CLIP	1
35	8L8578	SUPPORT	2
	1A2029	BOLT	2

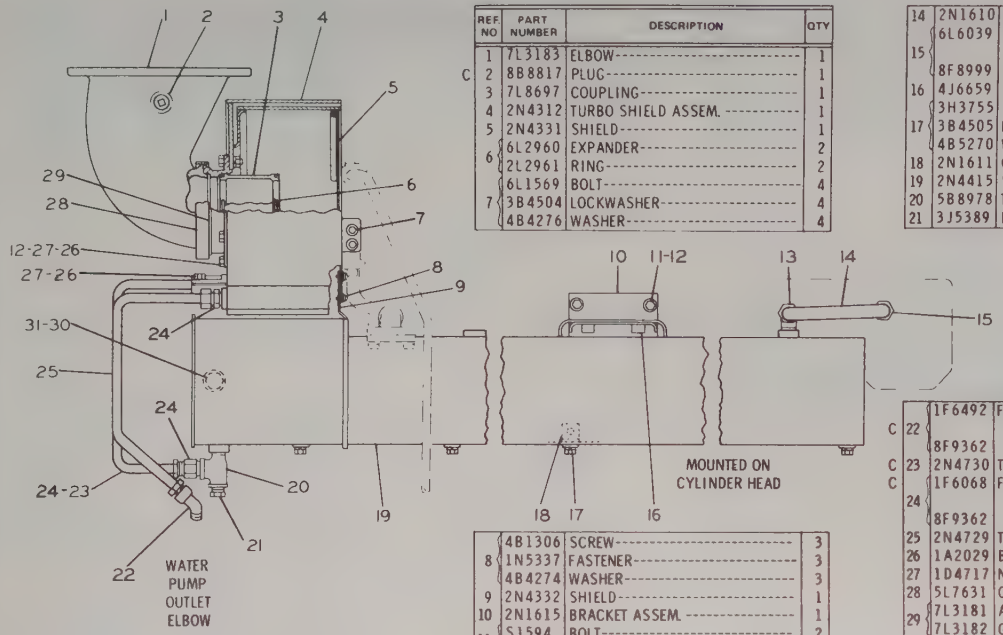
158924



REF. NO.	PART NUMBER	DESCRIPTION	QTY
1	7L3183	ELBOW	1
2	5B5098	PLUG	1
3	7L8697	COUPLING	1
4	2N4312	TURBO SHIELD ASSEM.	1
5	2N4331	SHIELD	1
6	6L2960	EXPANDER	2
	6L2961	RING	2
7	6L1569	BOLT	4
	3B4504	LOCKWASHER	4
	4B4276	WASHER	4
8	4B1306	SCREW	3
	1N5337	FASTENER	3
	4B4274	WASHER	3
9	2N4332	SHIELD	1
10	2N1615	BRACKET ASSEM.	1
11	S1594	BOLT	2
	4B4278	WASHER	2
12	3B4506	LOCKWASHER	8
13	1H4558	FITTING	1
	8F8999	NUT	1
14	2N1610	TUBE	1
15	6L6039	FITTING	1
	8F8999	NUT	1
16	4J6659	STRIP	2
17	3H3755	BOLT	5
	3B4505	LOCKWASHER	5
	4B5270	WASHER	5
18	2N1611	CLIP	5
19	2N4415	SHIELD ASSEM.	1
20	5B8978	TEE	1
21	3J5389	PLUG	1
22	1F6492	FITTING	1
	8F9362	NUT	1
23	2N4730	TUBE	1
24	1F6068	FITTING	3
	8F9362	NUT	1
25	2N4729	TUBE	1
26	1A2029	BOLT	8
27	1D4717	NUT	8
28	5L7631	CLAMP	1
29	7L3181	ADAPTER	1
	7L3182	GASKET	1

137631

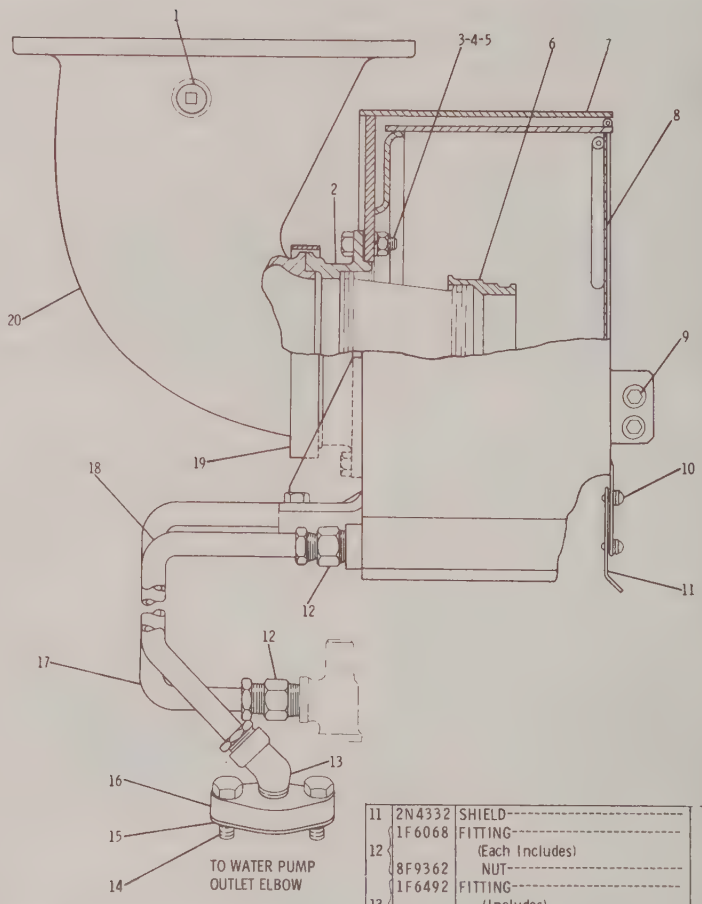
2N6295 WATER COOLED TURBOCHARGER AND MANIFOLD SHIELD GROUP—Type 1—Replaced by 6N6631 shown on Page 100L-2
Serial No. 46B2437—Up
Part of 2N6692 Manifold and Turbocharger Shield Arrangements listed on Page 100G-2



	REF NO	PART NUMBER	DESCRIPTION	QTY
C	1	7L3183	ELBOW	1
C	2	8B8817	PLUG	1
	3	7L8697	COUPLING	1
	4	2N4312	TURBO SHIELD ASSEM.	1
	5	2N4331	SHIELD	1
	6	6L2960	EXPANDER	2
		2L2961	RING	2
		6L1569	BOLT	4
	7	3B4504	LOCKWASHER	4
		4B4276	WASHER	4
	8	4B1306	SCREW	3
		1N5337	FASTENER	3
		4B4274	WASHER	3
	9	2N4332	SHIELD	1
	10	2N1615	BRACKET ASSEM.	1
	11	S1594	BOLT	2
		4B4278	WASHER	2
	12	3B4506	LOCKWASHER	8
	13	1H4558	FITTING	1
			(Includes)	
		8F8999	NUT	1
	14	2N1610	TUBE	1
	15	6L6039	FITTING	1
			(Includes)	
		8F8999	NUT	1
	16	4J6659	STRIP	2
	17	3H3755	BOLT	5
		3B4505	LOCKWASHER	5
		4B5270	WASHER	5
	18	2N1611	CLIP	5
	19	2N4415	SHIELD ASSEM.	1
	20	5B8978	TEE	1
	21	3J5389	PLUG	1
C	22	1F6492	FITTING	1
			(Includes)	
		8F9362	NUT	1
C	23	2N4730	TUBE	1
C	24	1F6068	FITTING	3
			(Each Includes)	
		8F9362	NUT	1
	25	2N4729	TUBE	1
	26	1A2029	BOLT	8
	27	1D4717	NUT	8
	28	5L7631	CLAMP	1
	29	7L3181	ADAPTER	1
		7L3182	GASKET	1
	30	V375	BOLT	1
	31	1K4649	SPACER	1

C INDICATES CHANGE

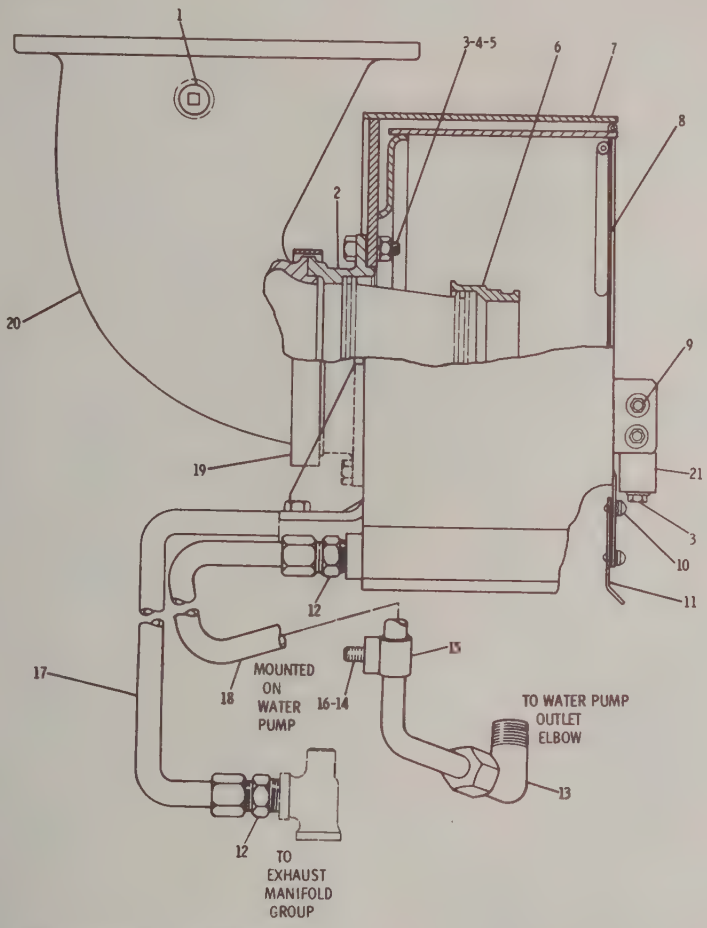
160165



REF. NO	PART NUMBER	DESCRIPTION	QTY
1	8B8817	PLUG	1
2	7L3181	ADAPTER	1
	7K3182	GASKET	1
3	1A2029	BOLT	8
4	1D4717	NUT	8
5	3B4506	LOCKWASHER	6
6	8L4097	ADPATER	1
7	2N4312	TURBO SHIELD ASSEM.	1
8	2N4331	SHIELD	1
9	6L1569	BOLT	4
	3B4504	LOCKWASHER	4
	4B4276	WASHER	4
10	4B1306	SCREW	3
	1N5337	FASTENER	3
	4B4274	WASHER	3
11	2N4332	SHIELD	1
12	1F6068	FITTING (Each Includes)	3
	8F9362	NUT	1
13	1F6492	FITTING (Includes)	1
	8F9362	NUT	1
14	S1591	BOLT	2
15	7B7129	GASKET	1
16	9L3624	FLANGE	1
17	2N4729	TUBE	1
18	2N4730	TUBE	1
19	5L7631	CLAMP	1
20	7L3183	ELBOW	1

206148

3N8997 TURBCOHARGER SHIELD GROUP
Serial No. 46B2437 to 46B5660 inclusive
Part of 3N9077 Water Shielded Manifold Arrangement listed on Page 100G-4



	REF. NO.	PART NUMBER	DESCRIPTION	QTY
	1	8B8817	PLUG	1
	2	7L3181	ADAPTER	1
		7K3182	GASKET	1
C	3	1A2029	BOLT	10
	4	1D4717	NUT	8
	5	3B4506	LOCKWASHER	6
	6	8L4097	ADAPTER	1
	7	2N4312	TURBO SHIELD ASSEM.	1
	8	2N4331	SHIELD	1
	9	6L1569	BOLT	4
		3B4504	LOCKWASHER	4
		4B4276	WASHER	4
	10	4B1306	SCREW	3
		1N5337	FASTENER	3
		4B4274	WASHER	3

	11	2N4332	SHIELD	1
	12	9M6522	CONNECTOR	3
	13	616717	ELBOW	1
	14	S1571	BOLT	2
	15	2H1743	CLIP	1
	16	4S5719	SPACER	1
	17	6N6355	TUBE ASSEM. (Includes)	1
		5H275	NUT	2
		5H273	SLEEVE	2
	18	6N2722	TUBE ASSEM. (Includes)	1
		5H275	NUT	2
		5H273	SLEEVE	2
	19	5L7631	CLAMP	1
	20	7L3183	ELBOW	1
C	21	8L8578	SUPPORT	2

C INDICATES CHANGE

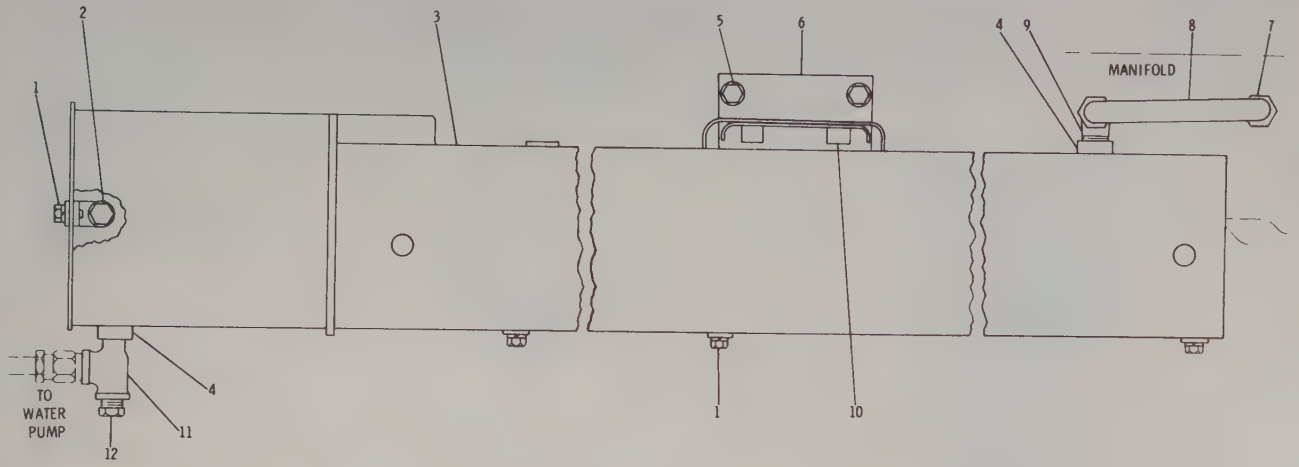
214167

6N6649 TURBOCHARGER SHIELD GROUP
Serial No. 46B5661—Up
Part of 3N9077 Water Shielded Manifold Arrangement listed on Page 100G-4

3N8998 MANIFOLD SHIELD GROUP

Serial No. 46B2437—Up

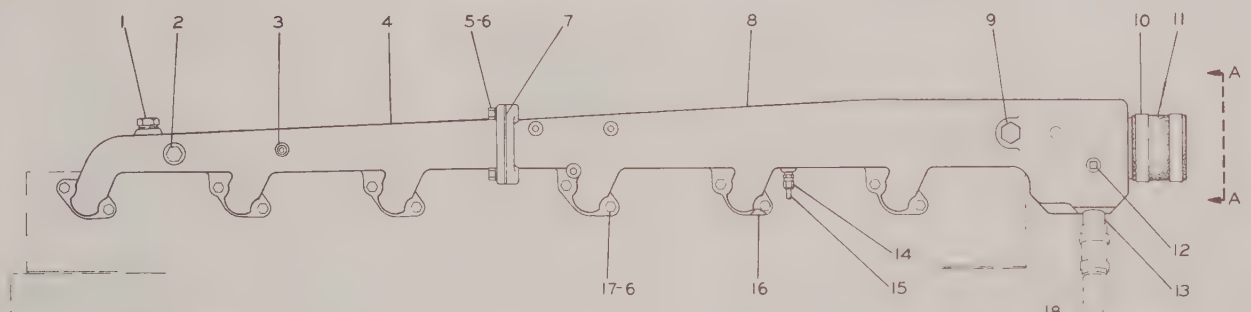
Part of 3N9077 Water Shielded Manifold Arrangement listed on Page 100G-4

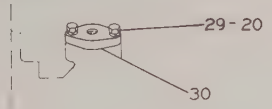


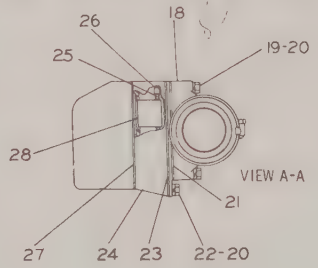
REF. NO.	PART NUMBER	DESCRIPTION	QTY
1	2H3755	BOLT	5
	3B4505	LOCKWASHER	5
	4B5270	WASHER	5
	2N1611	CLIP	5
2	V375	BOLT	1
	1K4649	SPACER	1
3	2N4415	SHIELD ASSEM. (Includes)	1
4	7M5007	FITTING	2
	S1594	BOLT	2
5	3B4506	LOCKWASHER	2
	4B4278	WASHER	2
6	2N1615	BRACKET ASSEM.	1
C 7	308310	CONNECTOR	1
C 8	6N9669	TUBE ASSEM.	1
C 9	311358	ELBOW	1
10	4J6659	STRIP	2
11	5B8978	TEE	1
12	3J5389	PLUG	1

C INDICATES CHANGE

160703







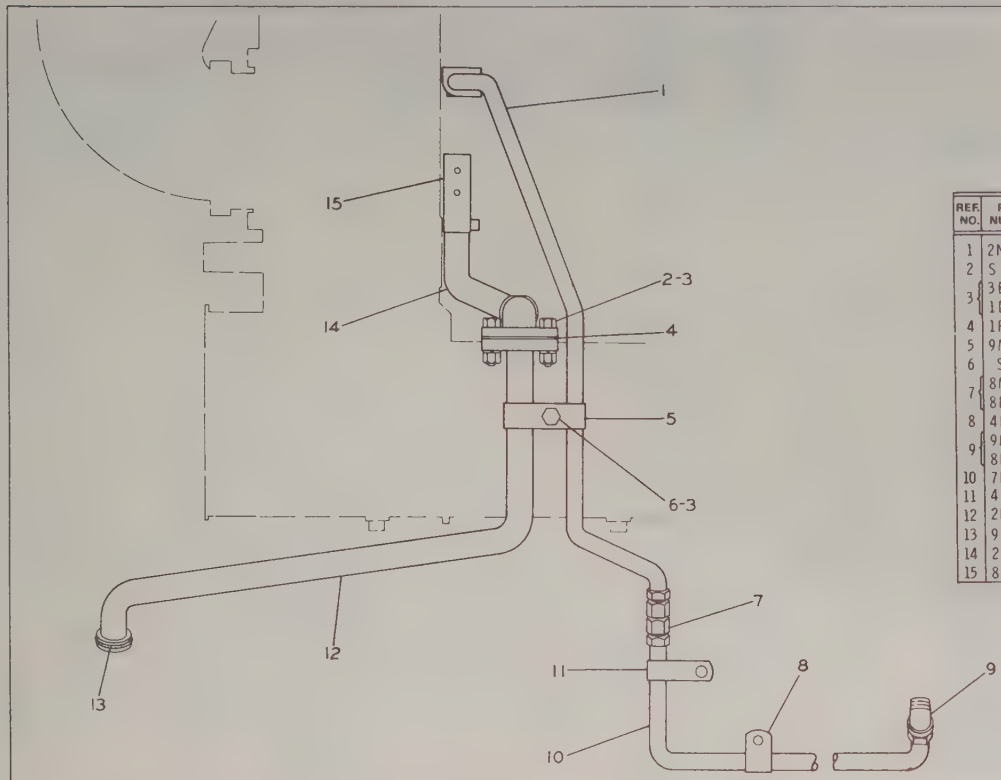
REF. NO.	PART NUMBER	DESCRIPTION	QTY
1	2B5803	PLUG	1
	5B2151	GASKET	1
2	3J5389	PLUG	1
3	9F2247	PLUG	1
4	7S9902	MANIFOLD	1
5	S1585	BOLT	2
6	3B4508	LOCKWASHER	14
7	2M707	GASKET	1
8	5L1685	MANIFOLD	1
9	2B5803	PLUG	1
	6B9186	GASKET	1
10	9M6738	CLAMP	2
11	6L3947	HOSE	1
12	2B858	PLUG	1
13	6B689	NIPPLE	1
14	4H1966	FITTING	1
	4H2495	NUT	1
	4H2494	SLEEVE	1
15	5L1907	TUBE	1
16	2H7594	GASKET	6
17	1A1460	BOLT	12
18	5L5275	ELBOW	1
19	T55	BOLT	4
20	3B4506	LOCKWASHER	7
21	5L1691	GASKET	1
22	L1351	BOLT	1
23	5L1688	PLATE	1
	5L1690	GASKET	1
24	5L2100	HOUSING ASSEM.	1
25	4L3848	SEAL	2
26	2H1193	FERRULE	1
27	5L1687	GASKET	1
28	6L6108	REGULATOR	2
29	S1591	BOLT	2
30	9L3624	FLANGE	1
	7B7129	GASKET	1

137468

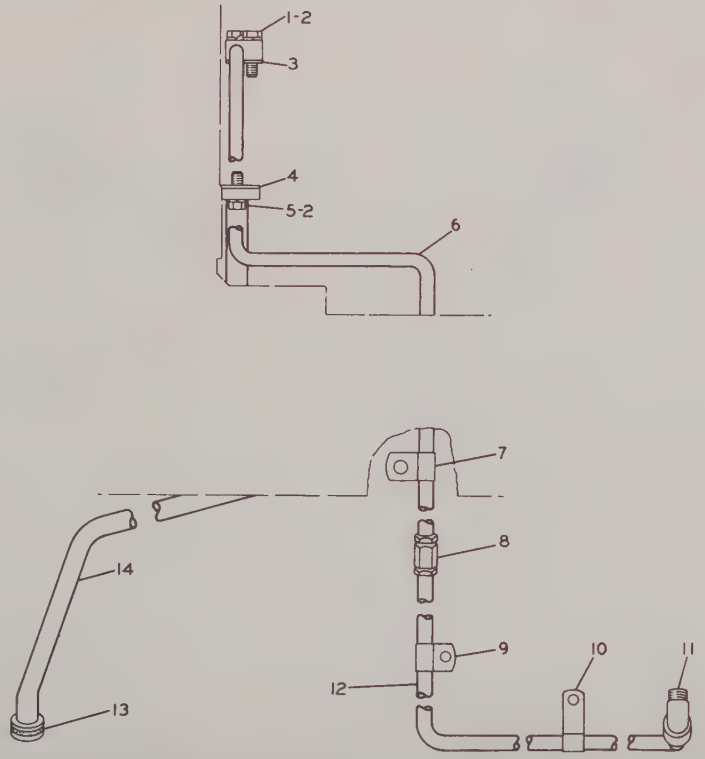
2N6455 WATER LINES GROUP
Part of 8L3417 Manifold and Turbocharger Shield Group listed on Page 100G-1

8L3412 OIL LINES GROUP

Part of 8L3417 Manifold and Turbocharger Shield Group and 2N6692 Manifold and Turbocharger Shield Arrangement listed on Pages 100G-1 and 100G-2. Only separate parts serviced. When complete Group is required order 3N4191 shown on Page 100R



REF. NO.	PART NUMBER	DESCRIPTION	QTY
1	2N4944	TUBE ASSEM.	1
2	S1588	BOLT	2
3	3B4506	LOCKWASHER	3
	1D4717	NUT	3
4	1F3131	GASKET	1
5	9M7540	CLAMP	2
6	S1594	BOLT	1
7	8M5900	FITTING	1
	8F9362	NUT	2
8	4B9302	CLIP	1
9	9M105	FITTING	1
	8F9362	NUT	1
10	7L2862	TUBE	1
11	4S5718	CLIP	1
12	2N4951	TUBE ASSEM.	1
13	9H6067	SEAL	1
14	2N4945	TUBE ASSEM.	1
15	8L8578	SUPPORT	2

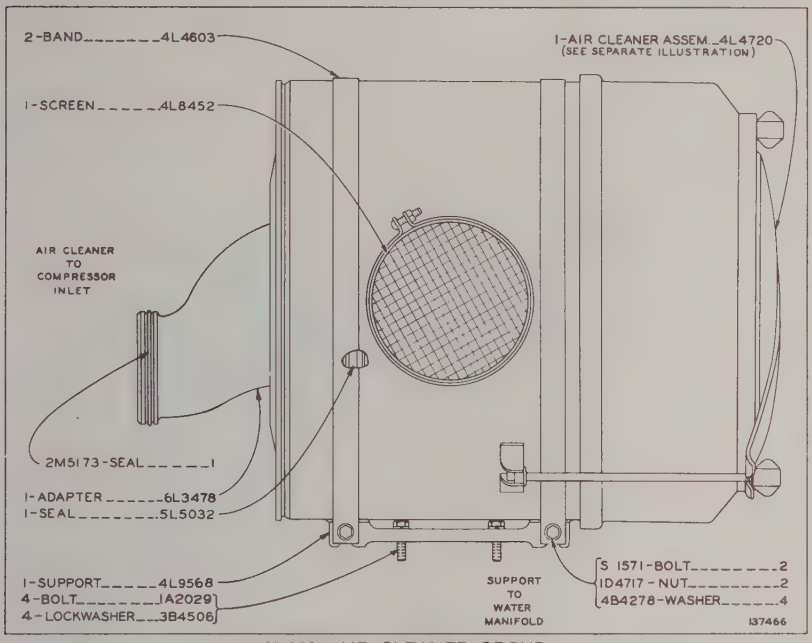


REF. NO.	PART NUMBER	DESCRIPTION	QTY
1	3B1915	BOLT	2
2	3B4506	LOCKWASHER	4
3	1S6595	GASKET	1
4	1S4810	GASKET	1
5	S1595	BOLT	2
6	5L8415	TUBE ASSEM.	1
7	1B8471	CLIP	1
8	1H6785	FITTING	1
	8F8998	NUT	2
9	4B418	CLIP	1
10	5M8429	CLIP	1
11	3B9053	FITTING	1
	8F8998	NUT	1
12	5L4902	TUBE ASSEM.	1
13	9H6067	SEAL	1
14	4L9221	TUBE ASSEM.	1

141873

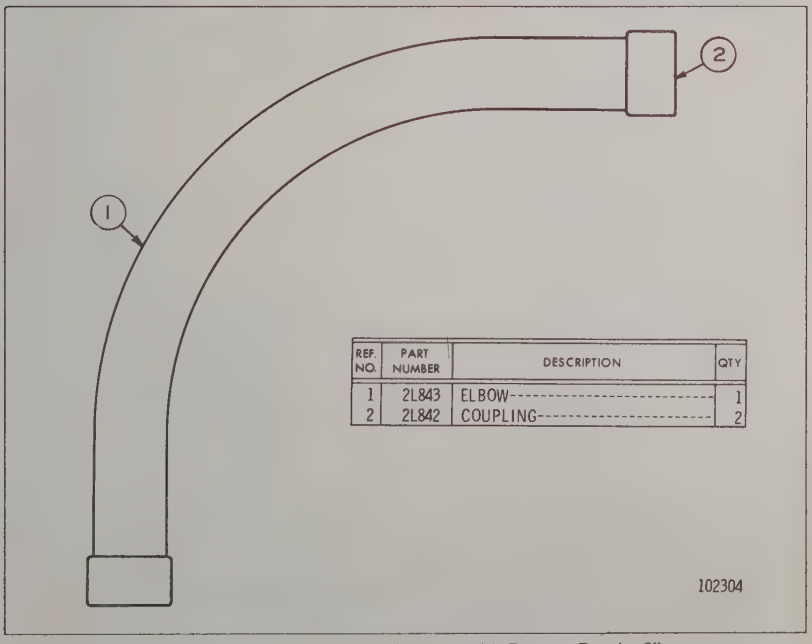
3N4191 OIL LINES GROUP

Part of 8L3417 Manifold and Turbocharger Shield Group listed on Page 100G-1



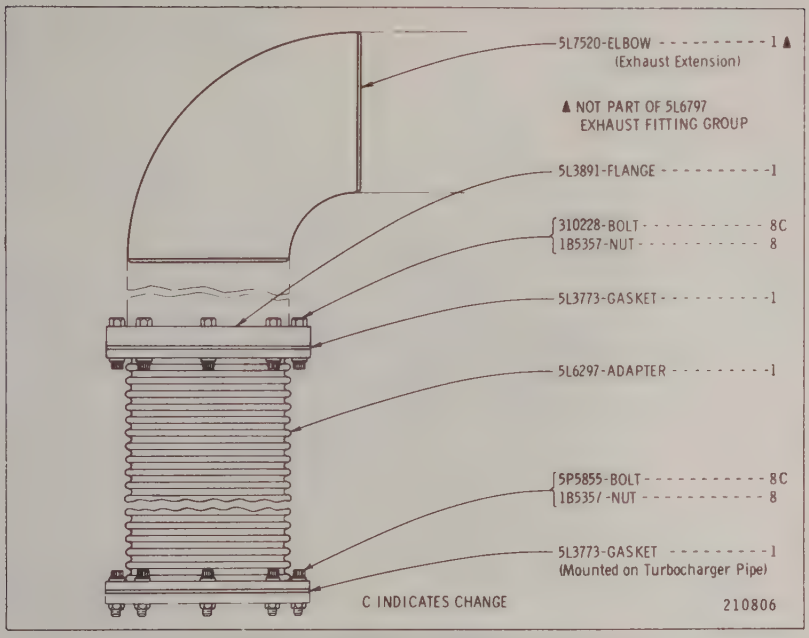
2N6684 AIR CLEANER GROUP

Serial No. 46B2437—Up. Part of 2N6692 Manifold and Turbocharger Shield Arrangement and also part of 3N9077 Water Shielded Manifold Arrangement listed on Pages 100G-2 and 100G-4. 4L4720 Air Cleaner parts are shown on Pages 16D and 17

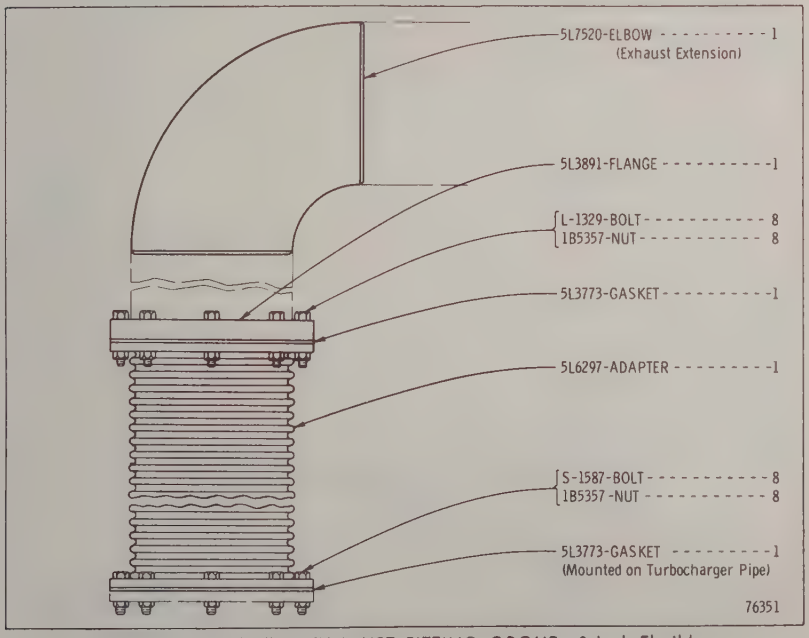


REF. NO.	PART NUMBER	DESCRIPTION	QTY
1	2L843	ELBOW	1
2	2L842	COUPLING	2

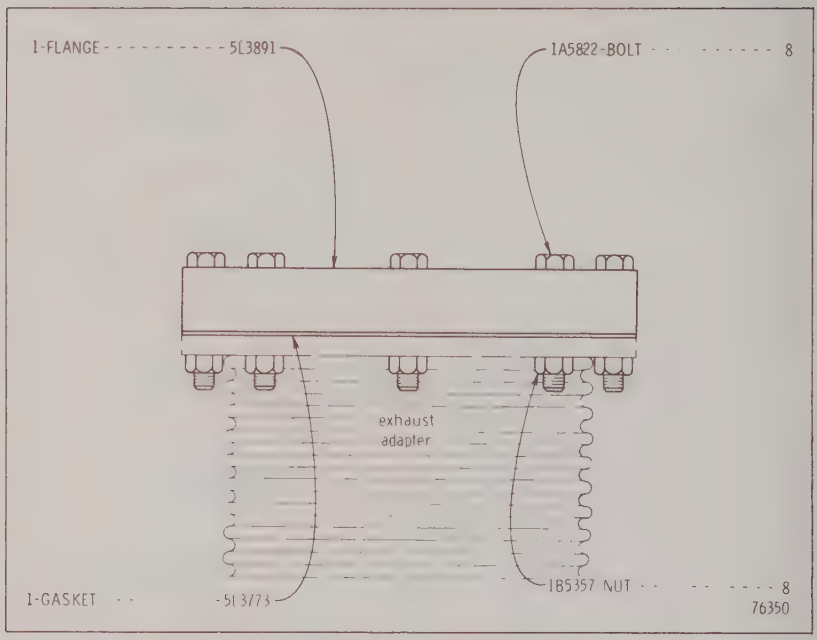
7L447 EXHAUST ELBOW GROUP—90 Degree Bend—6"



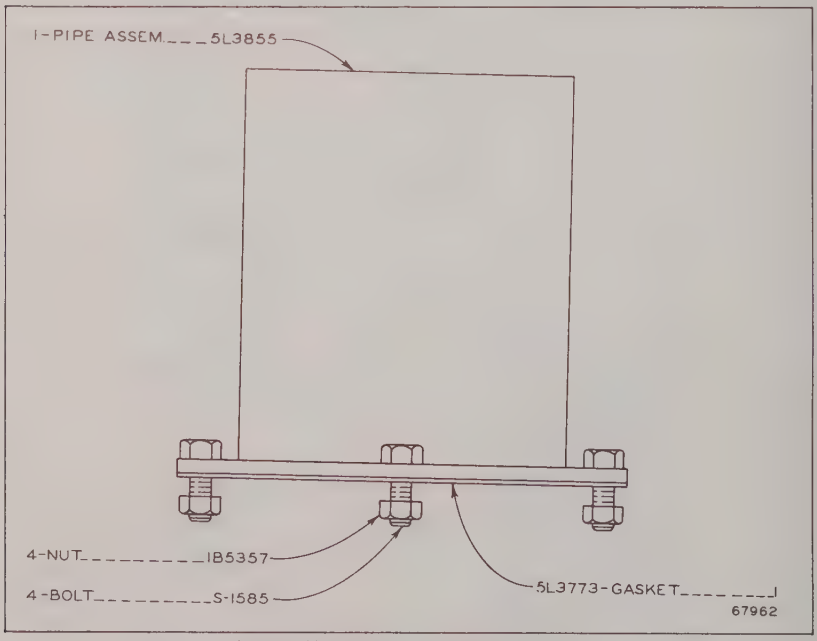
5L6797 FLEXIBLE EXHAUST FITTING GROUP—8 Inch



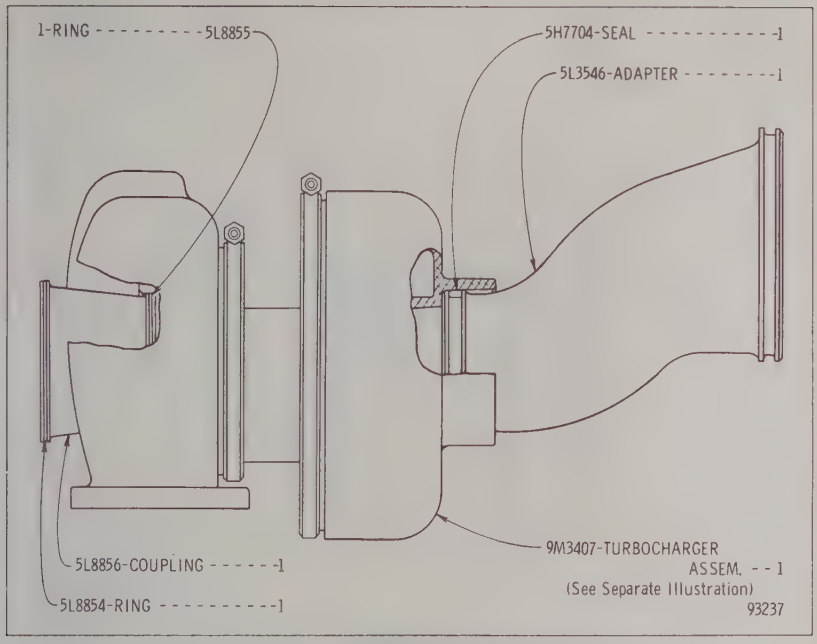
6L3733 HORIZONTAL EXHAUST FITTING GROUP—8 Inch Flexible



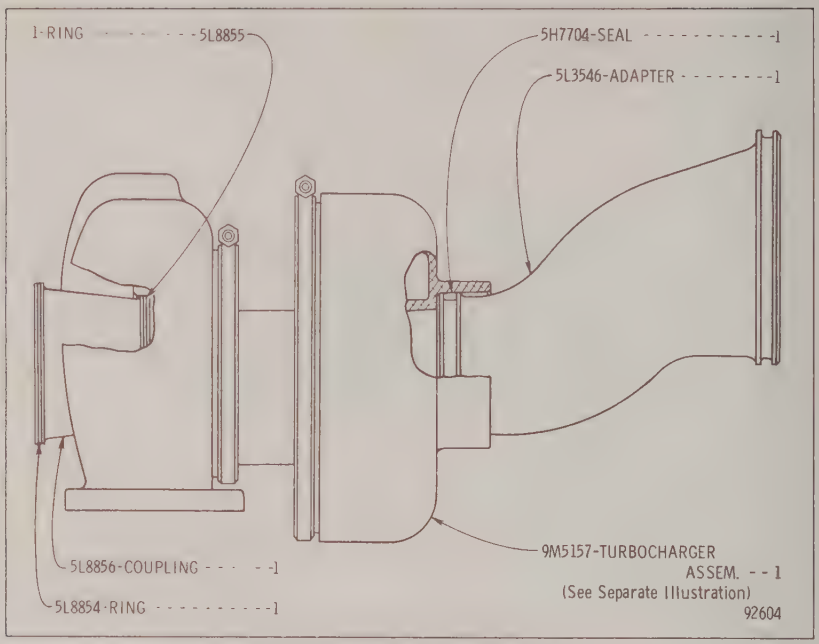
6L3642 EXHAUST FLANGE GROUP—8 Inch



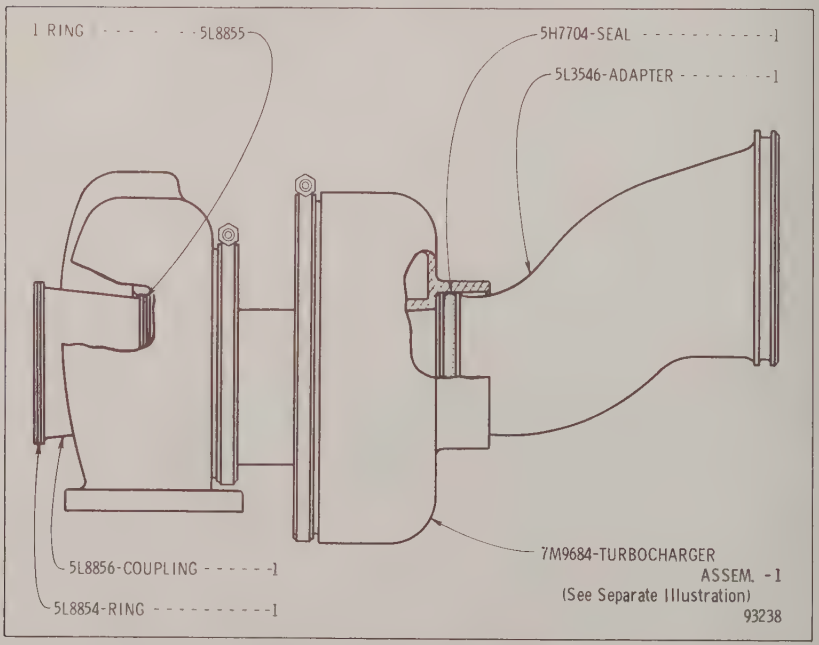
5L3338 EXHAUST PIPE GROUP—8 Inch



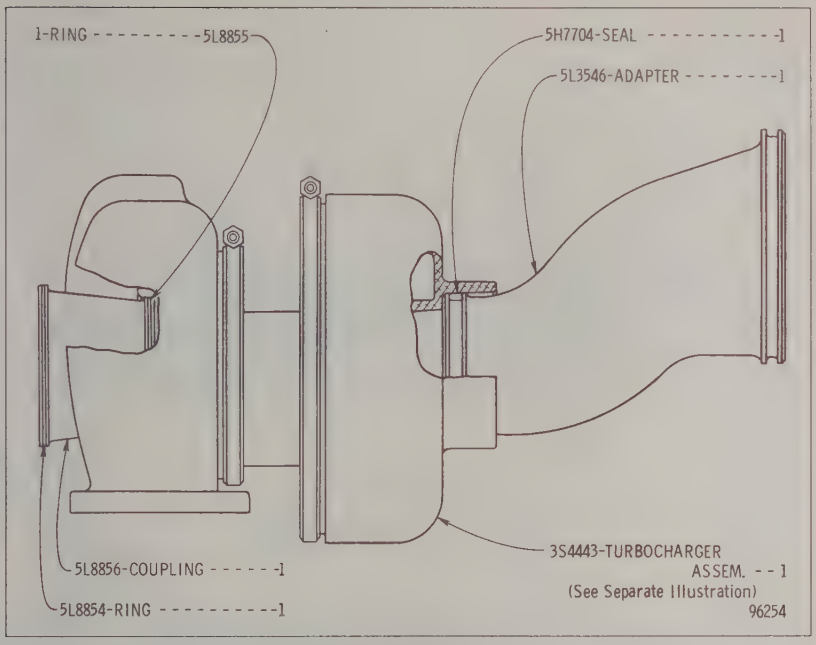
6L4232 TURBOCHARGER GROUP
Serial No. 46B1558—Up
9M3407 Turbocharger Assembly parts are shown on Page 106



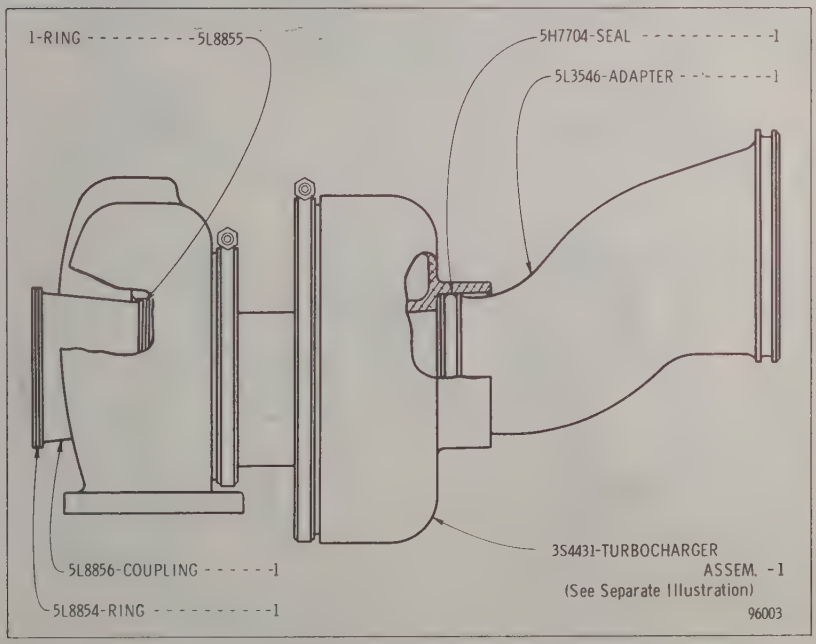
6L4233 TURBOCHARGER GROUP
9M5157 Turbocharger Assembly parts are shown on Page 107



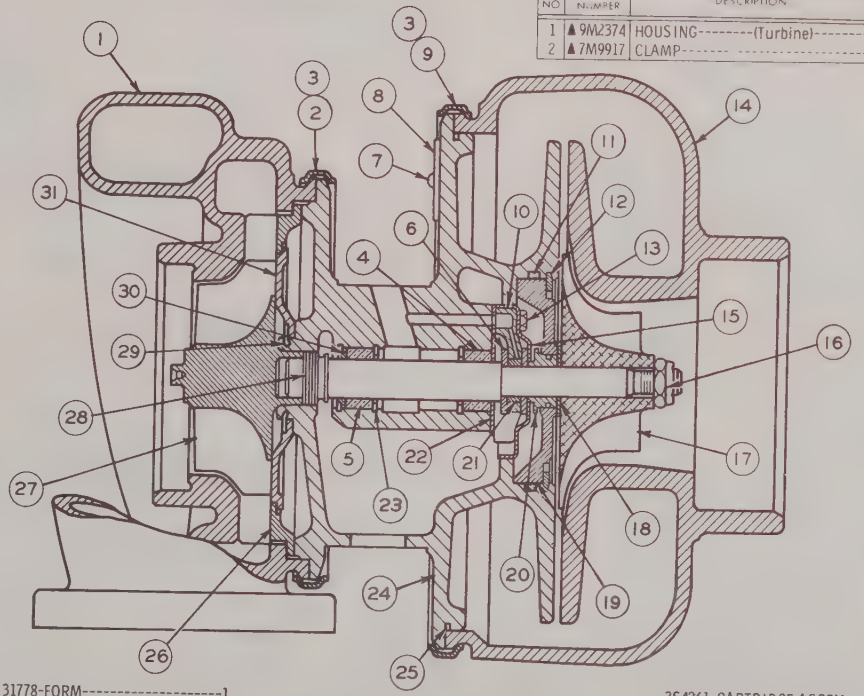
6L4231 TURBOCHARGER GROUP
Serial No. 46B1558—Up. Also part of 3N9077 Water Shielded Manifold Arrangement listed on Page 100G-4. 7M9684 Turbocharger Assembly parts are shown on Page 108



6L4233 TURBOCHARGER GROUP—Type 2
3S4443 Turbocharger Assembly parts are shown on Page 104B



6L4231 TURBOCHARGER GROUP—Type 2
Serial No. 46B1558—Up. Also part of 3N9077 Water Shielded Manifold Arrangement listed on Page 100G-4. 3S4431 Turbocharger Assembly parts are shown on Page 104C



REF NO	PART NUMBER	DESCRIPTION	QTY
1	▲9M2374	HOUSING--------(Turbine)--------	1
2	▲7M9917	CLAMP----------	1

REF NO	PART NUMBER	DESCRIPTION	QTY
3	▲7M9918	NUT----------	2
	3S5854	BEARING GROUP----------	1
		Consisting of:	
4	Not Serv.	BEARING--------(Grooved)--------	1
5	Not Serv.	BEARING--------(Plain)----------	1
	36070	FORM----------	1
		(Bearing Group Installation)	
6	7M9907	RING----------	2
7	▲8H3710	SCREW----------	2
	8H3710	SCREW----------	1
8	▲7M9920	PLATE----------(Name)----------	1
	2S1507	PLATE------(Name-Cartridge)----	1
9	▲7M9916	CLAMP----------	1
10	2S1306	BEARING----------	1
11	3S1427	SEAL----------	1
12	2S1307	RING----------	1
13	7M9910	BOLT----------	3
	7M9919	PLATE----------(Lock)----------	3
14	▲3S4256	COVER--------(Compressor)--------	1
15	2S1308	DEFLECTOR----------	1
16	4M8012	NUT----------	1
17	9M495	WHEEL----------	1
18	8M7167	SHIM--------(.003" Thick)--------	1
	8M7168	SHIM--------(.005" Thick)--------	1
	8M7169	SHIM--------(.010" Thick)--------	1
19	2S1305	INSERT----------	1
20	7M9908	SLEEVE----------	1
21	7M9923	SPACER----------	1
22	2S1310	SPACER----------	1
23	7M7611	RING----------	3
24	1S5372	HOUSING----------	1
25	9M9545	SEAL----------	1
26	▲8M7947	NOZZLE----------	1
27	9M491	WHEEL AND SHAFT ASSEM.--------	1
28	4M8013	RING----------	4
29	4M6990	RING----------	1
30	1S3887	SLEEVE----------	1
31	1S2098	PLATE----------	1

31778-FORM----------1
(Instructions for Installing Turbocharger Assem. or Turbocharger Nozzle)

3S4261-CARTRIDGE ASSEM. -----1
(Consists of all Parts Except Those Marked ▲)

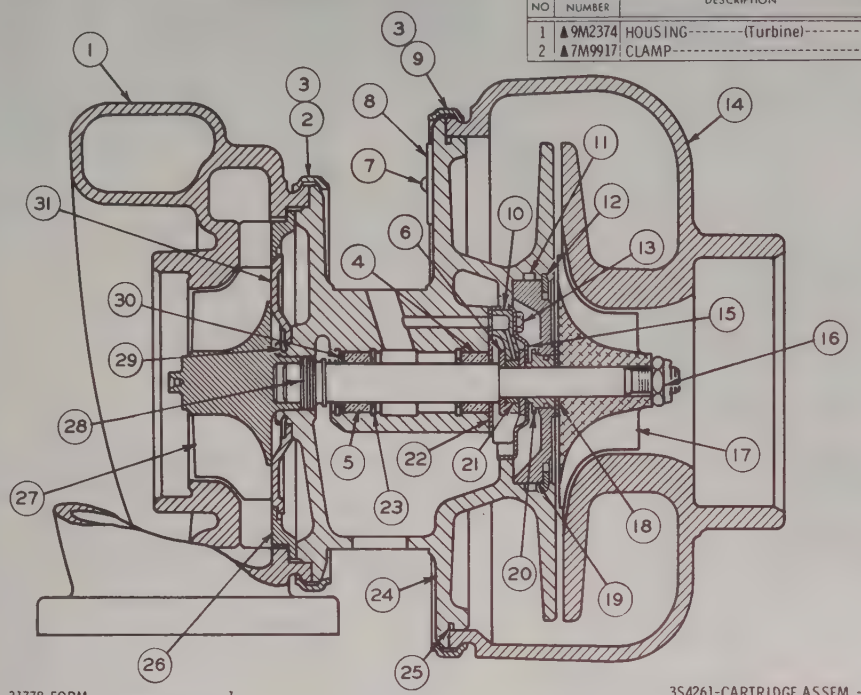
96255

3S4443 TURBOCHARGER ASSEMBLY

Part of 6L4233 Turbocharger Groups shown on Pages 104A and 104D. Note: 4N5279 Bearing Group containing 1—Grooved and 1—Smooth Bearing with standard I.D. & .010 oversize O.D. is available

3S4431 TURBOCHARGER GROUP

Also part of 6L4231 Turbocharger Groups shown on Pages 104A and 104D. Note: 4N5279 Bearing Group containing 1—Grooved and 1—Smooth Bearing with standard I.D. and .010 oversize O.D. is available



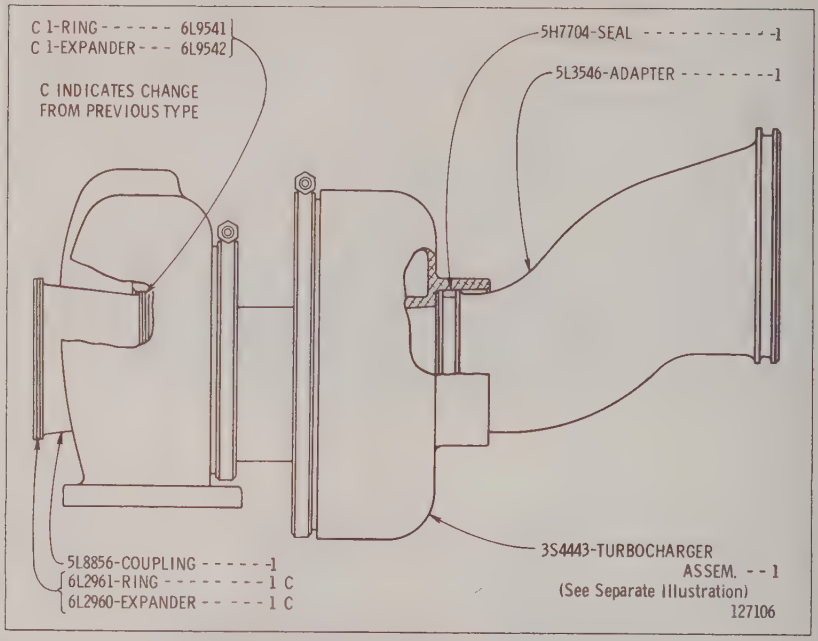
REF. NO.	PART NUMBER	DESCRIPTION	QTY.
1	▲9M2374	HOUSING--------(Turbine)--------	1
2	▲7M9917	CLAMP----------	1

REF. NO.	PART NUMBER	DESCRIPTION	QTY.
3	▲7M9918	NUT----------	2
	3S5854	BEARING GROUP----------	1
		Consisting of:	
4	Not Serv.	BEARING--------(Grooved)--------	1
5	Not Serv.	BEARING--------(Plain)--------	1
	36070	FORM----------	1
		(Bearing Group Installation)	
6	7M9907	RING----------	2
7	▲8H3710	SCREW----------	2
	8H3710	SCREW----------	1
8	▲7M9920	PLATE----------(Name)----------	1
	2S1507	PLATE------(Name-Cartridge)------	1
9	▲7M9916	CLAMP----------	1
10	2S1306	BEARING----------	1
11	3S1427	SEAL----------	1
12	2S1307	RING----------	1
13	7M9910	BOLT----------	3
	7M9919	PLATE----------(Lock)----------	3
14	▲3S4256	COVER--------(Compressor)--------	1
15	2S1308	DEFLECTOR----------	1
16	4M8012	NUT----------	1
17	9M495	WHEEL----------	1
18	8M7167	SHIM--------(.003" Thick)--------	1
	8M7168	SHIM--------(.005" Thick)--------	1
	8M7169	SHIM--------(.010" Thick)--------	1
19	2S1305	INSERT----------	1
20	7M9908	SLEEVE----------	1
21	7M9923	SPACER----------	1
22	2S1310	SPACER----------	1
23	7M7611	RING----------	3
24	1S5372	HOUSING----------	1
25	9M9545	SEAL----------	1
26	▲8M7945	NOZZLE----------	1
27	9M491	WHEEL AND SHAFT ASSEM.--------	1
28	4M8013	RING----------	4
29	4M6990	RING----------	1
30	1S3887	SLEEVE----------	1
31	1S2098	PLATE----------	1

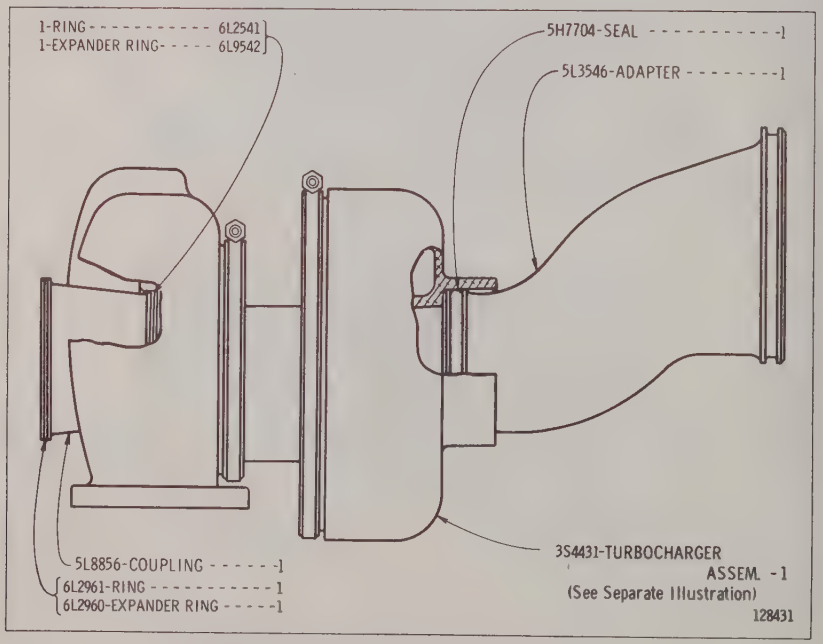
31778-FORM----------1
(Instructions for Installing Turbocharger Assem. or Turbocharger Nozzle)

3S4261-CARTRIDGE ASSEM. -----1
(Consists of all Parts Except Those Marked ▲)

97516

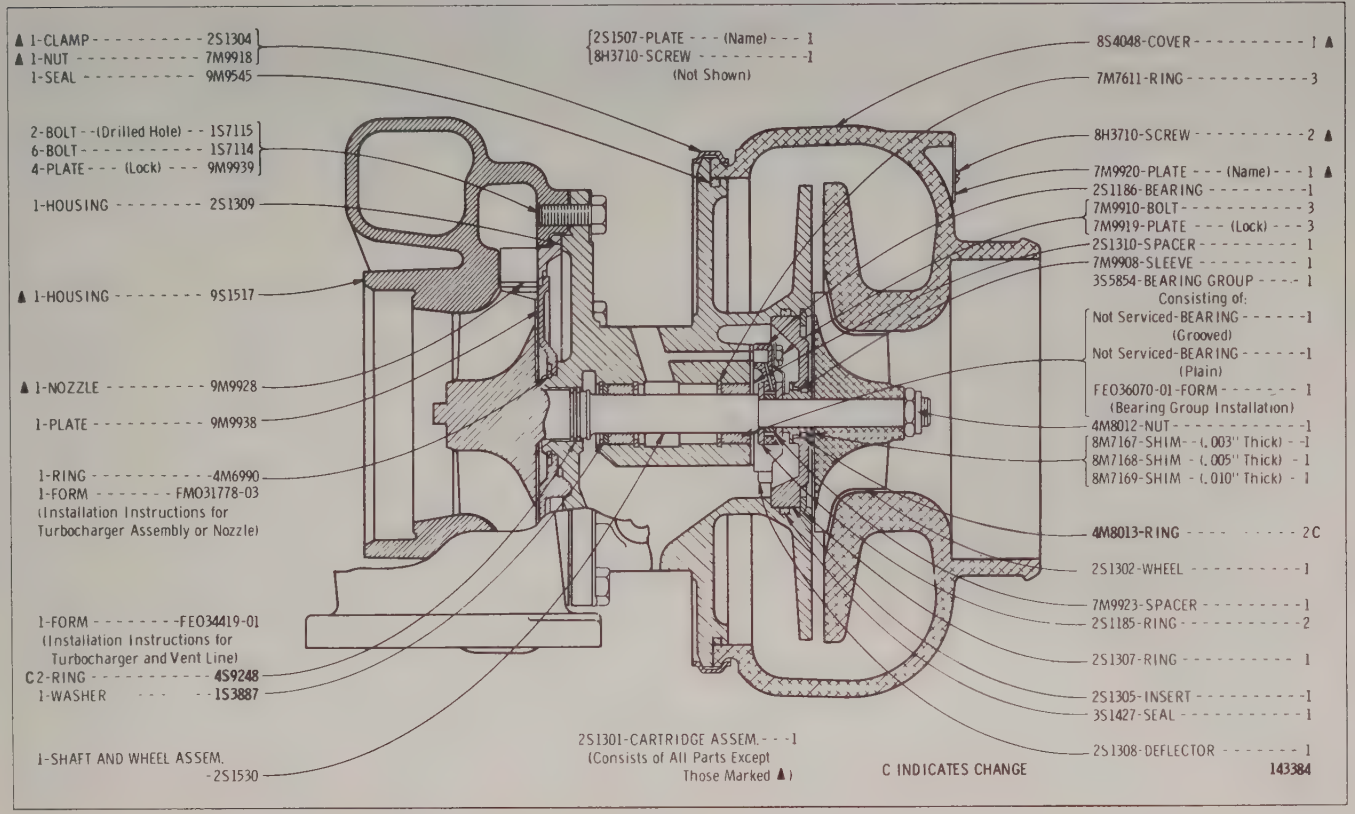


6L4233 TURBOCHARGER GROUP—Type 3
3S4443 Turbocharger parts are shown on Page 104B

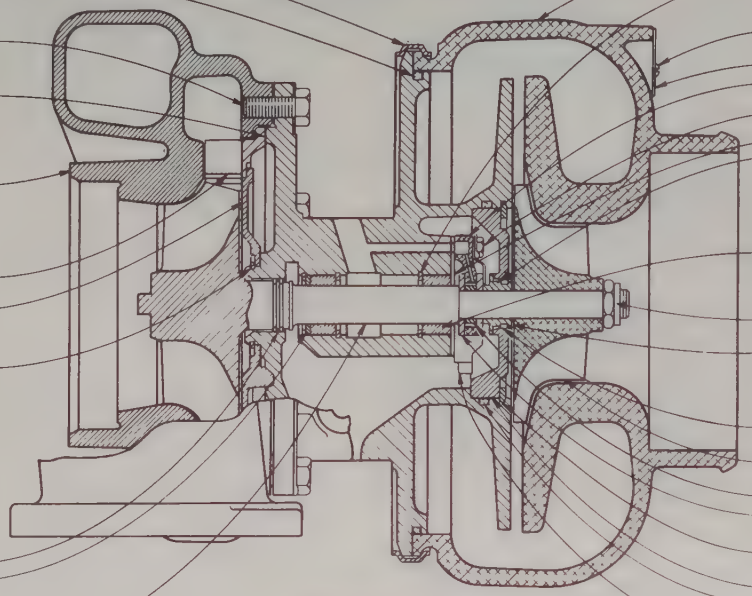


6L4231 TURBOCHARGER GROUP—Type 3
3S4431 Turbocharger parts are shown on Page 104C

2S2489 TURBOCHARGER ASSEMBLY
Serial No. 46B2056 to 46B4182 inclusive and 77B1—Up
Also part of 6L5685 Turbocharger Group shown on Page 17



2S2489 TURBOCHARGER ASSEMBLY
Serial No. 46B4183—Up
Also part of 6L5685 Turbocharger Group shown on Page 17



▲ 1-CLAMP - - - - - - - - - - 2S1304
▲ 1-NUT - - - - - - - - - - - - 7M9918
1-SEAL - - - - - - - - - - - 9M9545

2-BOLT - -(Drilled Hole) - - 1S7115
6-BOLT - - - - - - - - - - - - 1S7114
4-PLATE - - - (Lock) - - - 9M9939

1-HOUSING - - - - - - - - - - - 4N4042

▲ 1-HOUSING - - - - - - - - 9S1517

▲ 1-NOZZLE - - - - - - - - - 9M9928

1-PLATE - - - - - - - - - - 9M9938

1-RING - - - - - - - - - - - - 4M6990

1-FORM - - - - - - - - FE034419-01
(Installation Instructions for
Turbocharger and Vent Line)
2-RING - - - - - - - - - - - - 4S9248
1-WASHER - - - - - - - - 1S3887

1-SHAFT AND WHEEL ASSEM.
- 2S1530

2S1507-PLATE - - - (Name) - - - 1
8H3710-SCREW - - - - - - - - - - -1
(Not Shown)

8S4048-COVER - - - - - - - - - - 1 ▲

7M7611-RING - - - - - - - - - - - 3

8H3710-SCREW - - - - - - - - - - 2 ▲

7M9920-PLATE - - - (Name) - - - 1 ▲
2S1186-BEARING - - - - - - - - -1
7M9910-BOLT - - - - - - - - - - - 3
7M9919-PLATE - - - (Lock) - - - 3
2S1310-SPACER - - - - - - - - - 1
7M9908-SLEEVE - - - - - - - - - 1
3S5854-BEARING GROUP - - - - 1
Consisting of:
Not Serviced-BEARING - - - - - -1
(Grooved)
Not Serviced-BEARING - - - - - -1
(Plain)
FM036070-01-FORM - - - - - - - - - - 1
(Bearing Group Installation)
4M8012-NUT - - - - - - - - - - - -1
8M7167-SHIM - - (.003" Thick) - -1
8M7168-SHIM - - (.005" Thick) - 1
8M7169-SHIM - - (.010" Thick) - 1

4M8013-RING - - - - - - - - - - 2

2S1302-WHEEL - - - - - - - - - - 1

7M9923-SPACER - - - - - - - - - 1
2S1185-RING - - - - - - - - - - - 2

2S1307-RING - - - - - - - - - - - 1

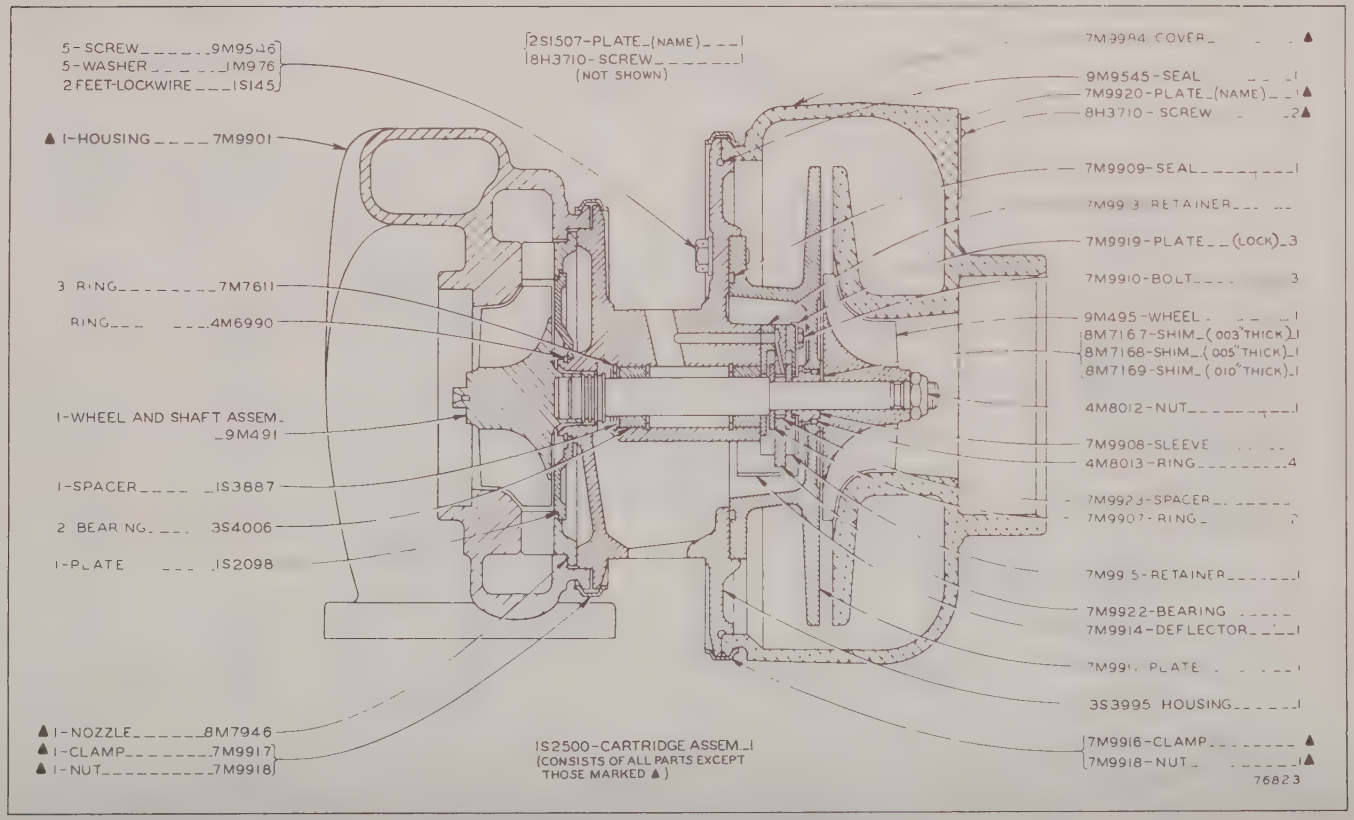
2S1305-INSERT - - - - - - - - - - 1
3S1427-SEAL - - - - - - - - - - - 1

2S1308-DEFLECTOR - - - - - - - - 1

4N4040-CARTRIDGE ASSEM. - - - - 1C
(Consists of All Parts Except
Those Marked ▲)

C INDICATES CHANGE

143385

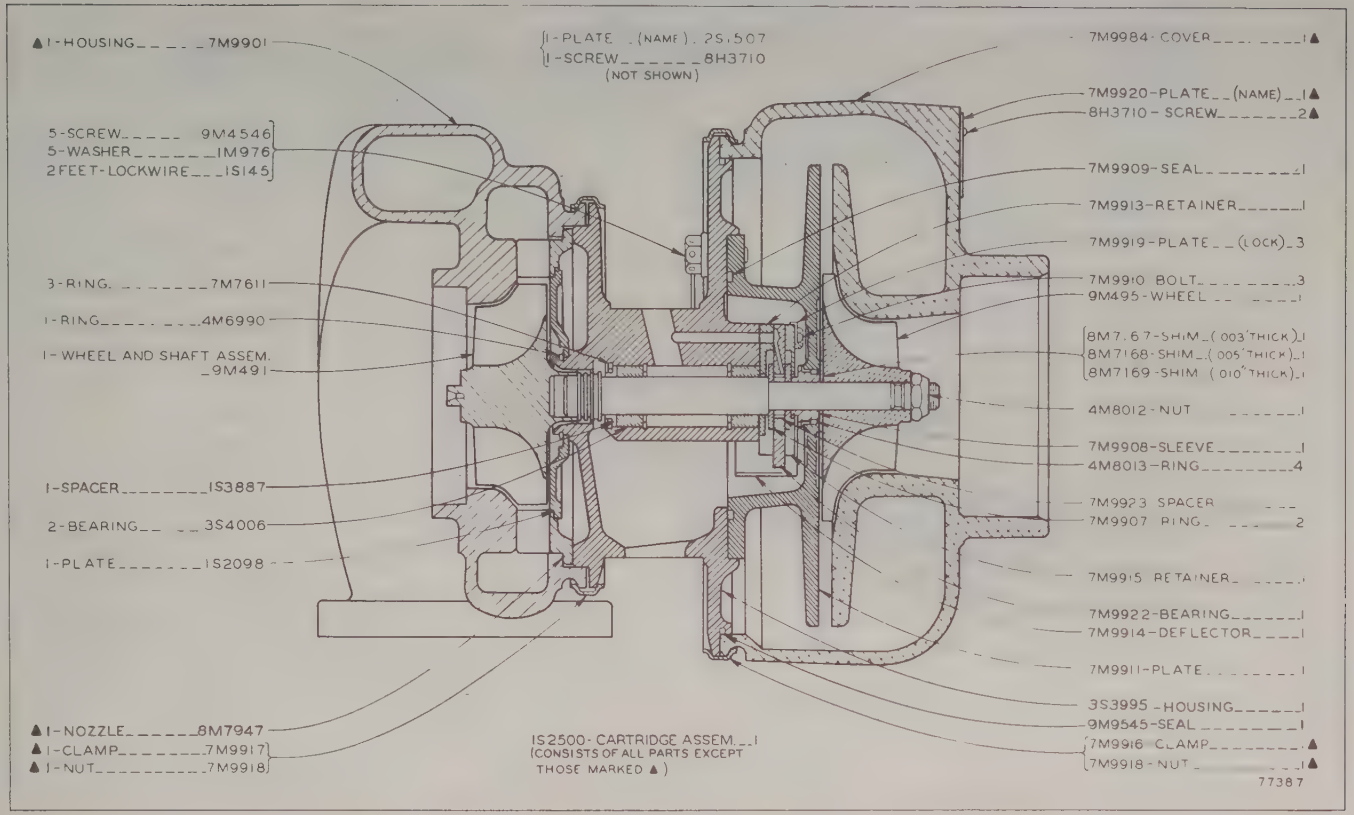


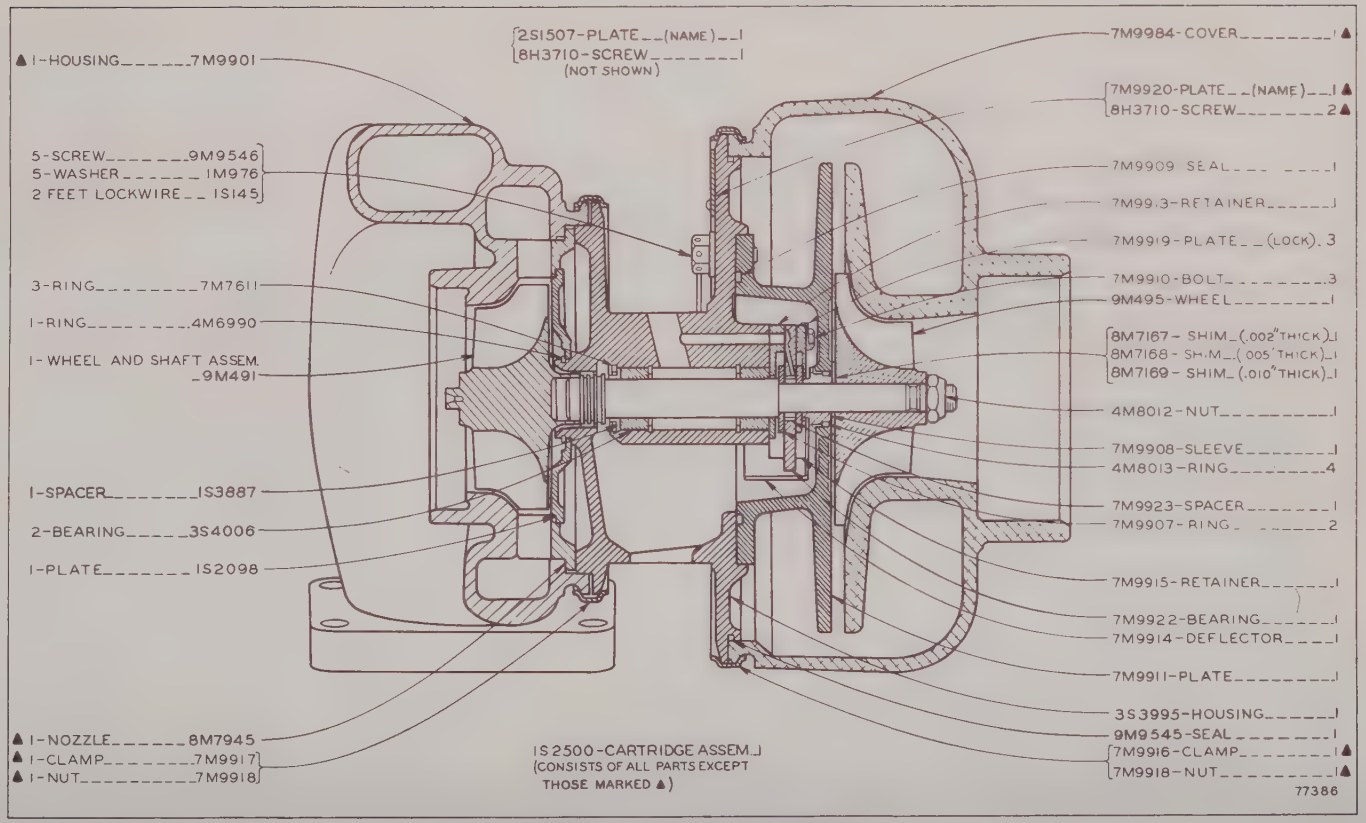
9M3407 TURBOCHARGER ASSEMBLY

Part of 6L4232 Turbocharger Group shown on Page 103

9M5157 TURBOCHARGER ASSEMBLY

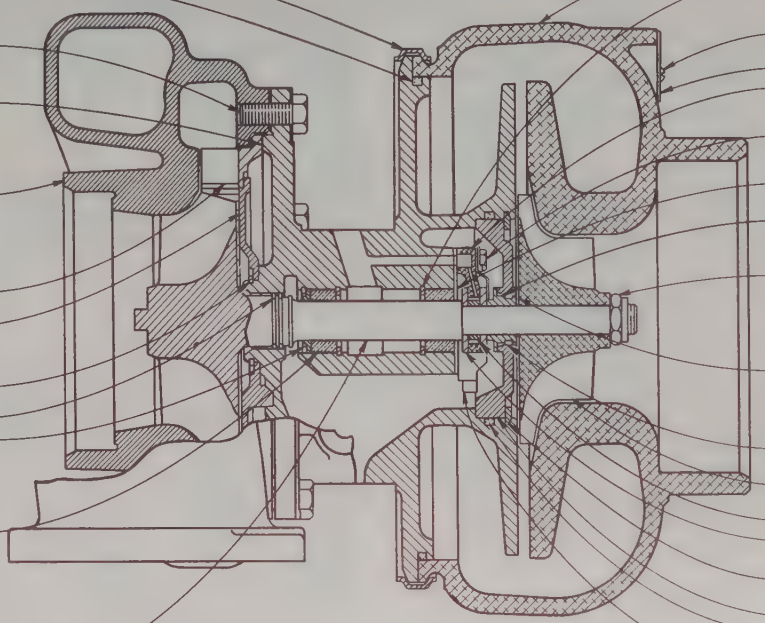
Part of 6L4233 Turbocharger Group shown on Page 104





7M9864 TURBOCHARGER ASSEMBLY
Part of 6L4231 Turbocharger Group shown on Page 104
Only separate parts serviced. When complete Assembly is required order 3S4431 shown on Page 104C

2S880 TURBOCHARGER ASSEMBLY
Effective with Serial No. 46B2437—Up and 77B1—Up



▲1-CLAMP - - - - - - - - - - 2S1304
▲1-NUT - - - - - - - - - - - 7M9918
1-SEAL - - - - - - - - - - - 9M9545

2-BOLT - -(Drilled Hole) - - 1S7115
6-BOLT - - - - - - - - - - - 1S7114
4-PLATE - - - - - - - - - - 9M9939

1-HOUSING - - - - - - - - - 2S1309

1-FORM - - - - - - - - - - - - 31778
(Instructions for installing Turbocharger Assem. or nozzle)

▲1-HOUSING - - - - - - - - 2S1299

1-FORM - - - - - - - - - - - - 34419
(Instructions for installing Turbocharger and vent line)

▲1-NOZZLE - - - - - - - - - - 1S6563

1-PLATE - - - - - - - - - - - 9M9938

1-RING - - - - - - - - - - - - 4M6990

2-RING - - - - - - - - - - - - 4M8013
1-WASHER - - - - - - - - - - 1S3887

1-BEARING GROUP - - - - 3S5854
Consisting of:
1-BEARING - - - - - Not Serviced (Grooved)
1-BEARING - - - - - Not Serviced (Plain)
1-FORM - - - - - - - - - - - - 36070
(Bearing Group Installation)

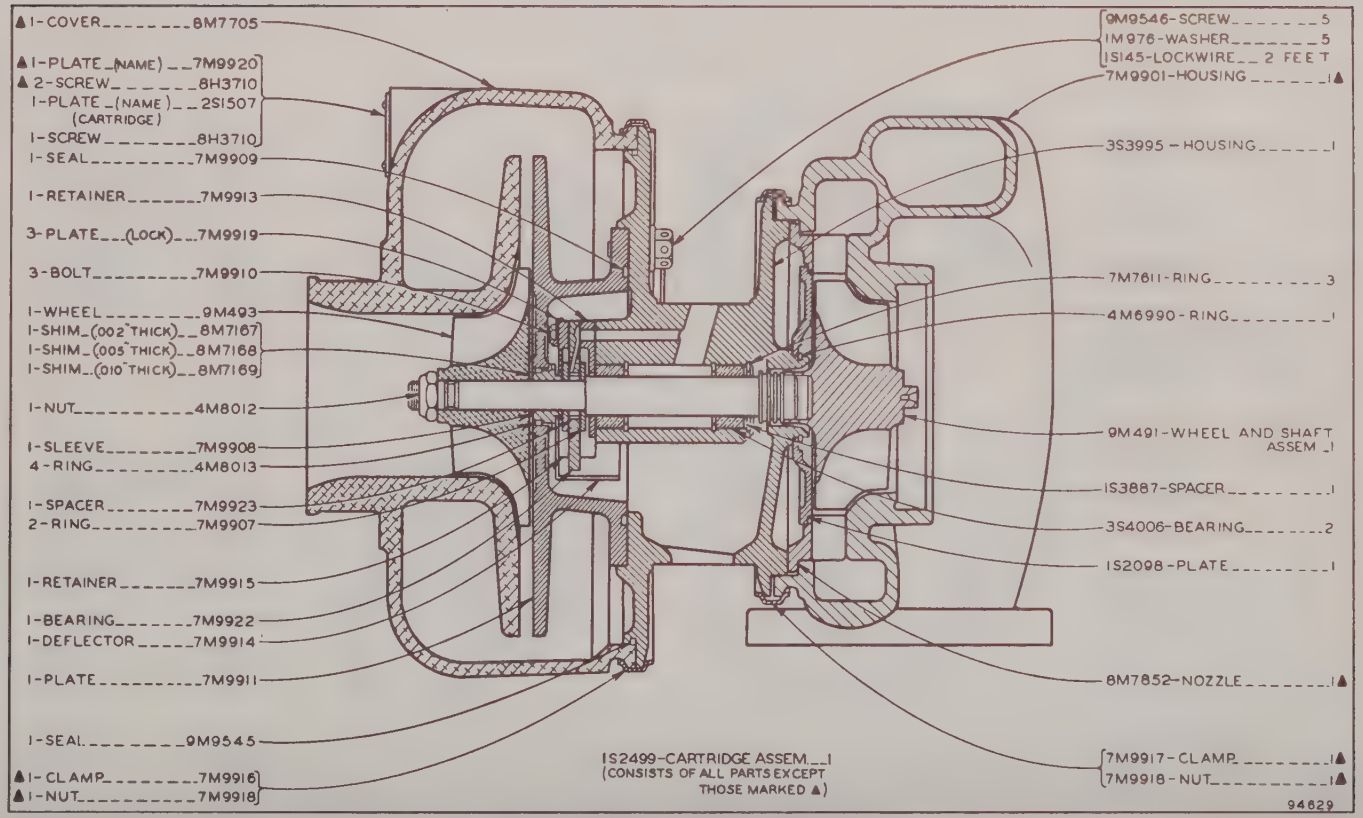
1-SHAFT AND WHEEL ASSEM.- -2S1530

1-PLATE - - - (Name) - - - 2S1507
1-SCREW - - - - - - - - - - -8H3710
(Not Shown)

1-CARTRIDGE ASSEM. - - 2S1534
(Consists of all parts except those marked ▲)

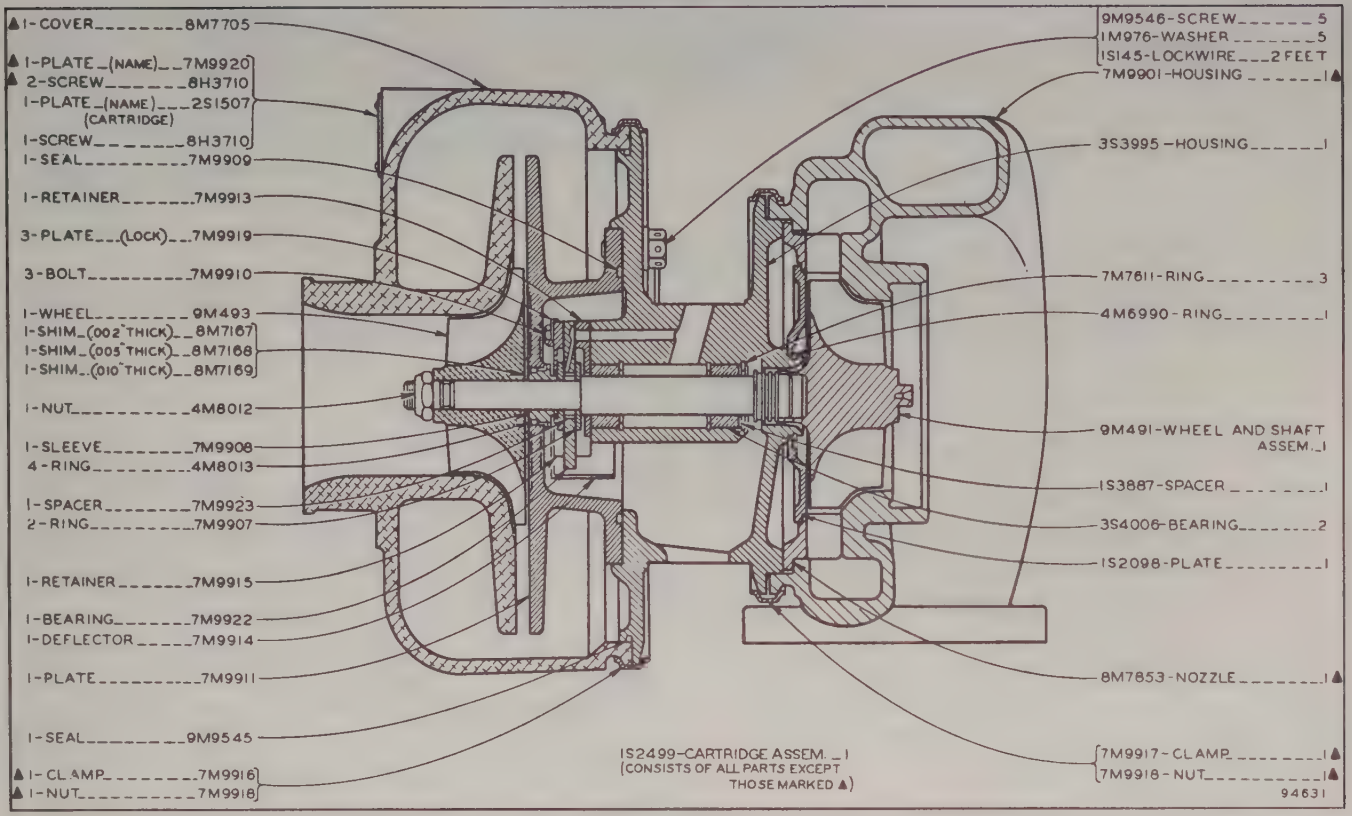
9M9927-COVER - - - - - - - - - - 1▲
7M7611-RING - - - - - - - - - - 3
8H3710-SCREW - - - - - - - - - 2▲
7M9920-PLATE - - - (Name) - - - 1▲
2S1186-BEARING - - - - - - - - -1
7M9910-BOLT - - - - - - - - - - - -3
7M9919-PLATE - - - (Lock) - - - 3
2S1310-SPACER - - - - - - - - - 1
7M9908-SLEEVE - - - - - - - - - 1
4M8012-NUT - - - - - - - - - - - -1
8M7167-SHIM- - (.003" Thick) - -1
8M7168-SHIM - (.005" Thick) - 1
8M7169-SHIM - (.010" Thick) - 1
4M8013-RING - - - - - - - - - - 2
9M9932-WHEEL - - - - - - - - - - -1
7M9923-SPACER - - - - - - - - - -1
2S1185-RING - - - - - - - - - - - -2
2S1307-RING - - - - - - - - - - 1
2S1305-INSERT - - - - - - - - - 1
3S1427-SEAL - - - - - - - - - - - -1
2S1308-DEFLECTOR - - - - - - - 1

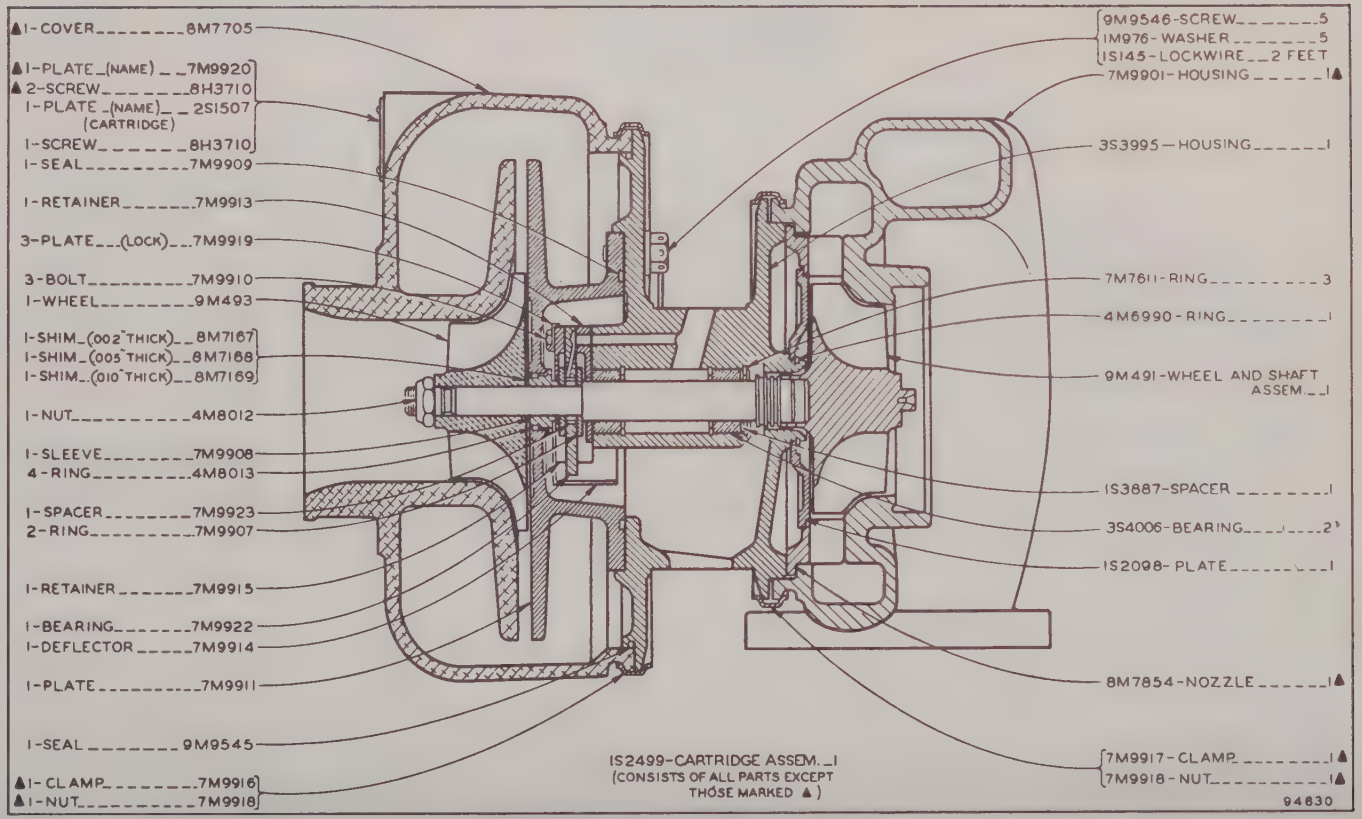
79511



8M7147 TURBOCHARGER ASSEMBLY
Serial No. 46B1558—Up

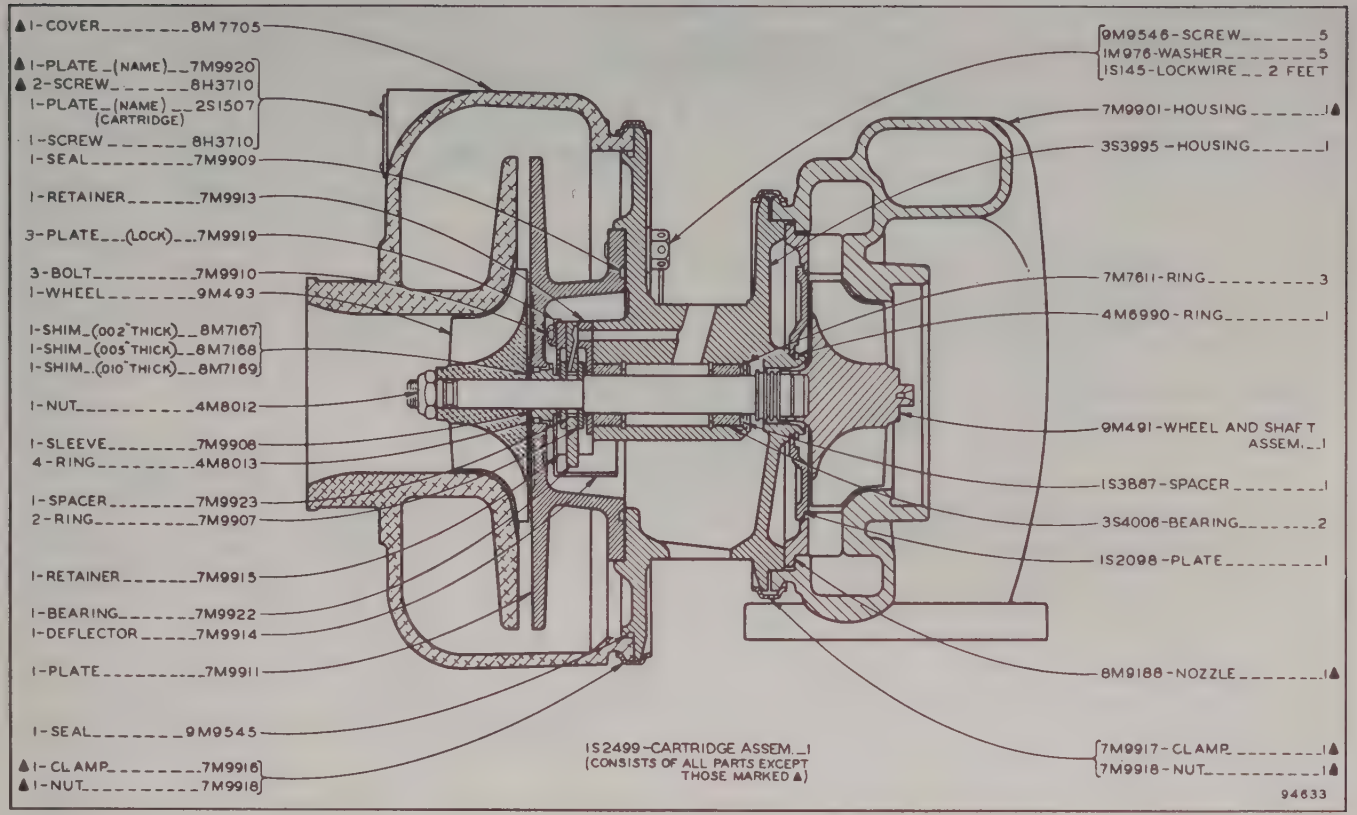
8M7148 TURBOCHARGER ASSEMBLY
Serial No. 46B1558—Up

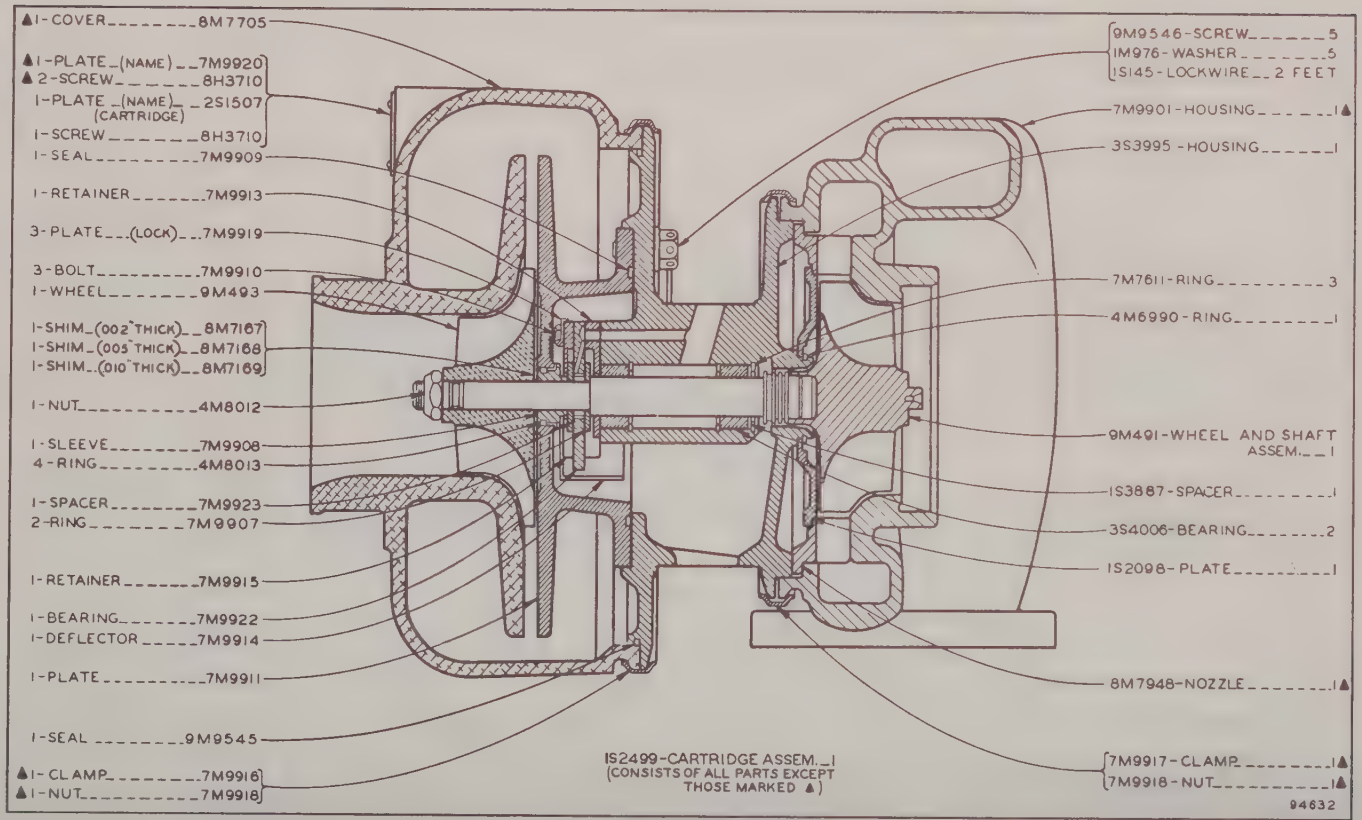




8M7149 TURBOCHARGER ASSEMBLY
Serial No. 46B1558—Up

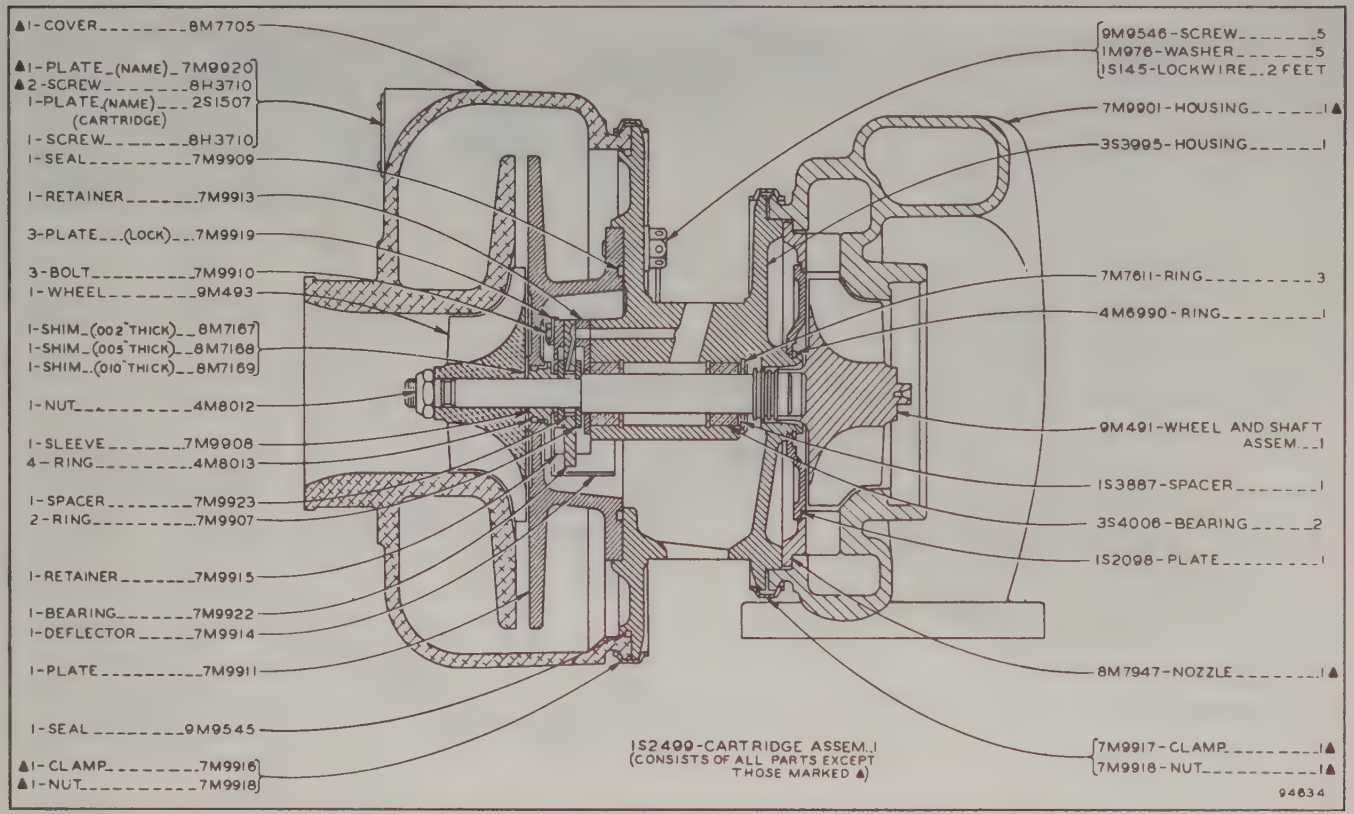
8M9073 TURBOCHARGER ASSEMBLY
Serial No. 46B1558—Up

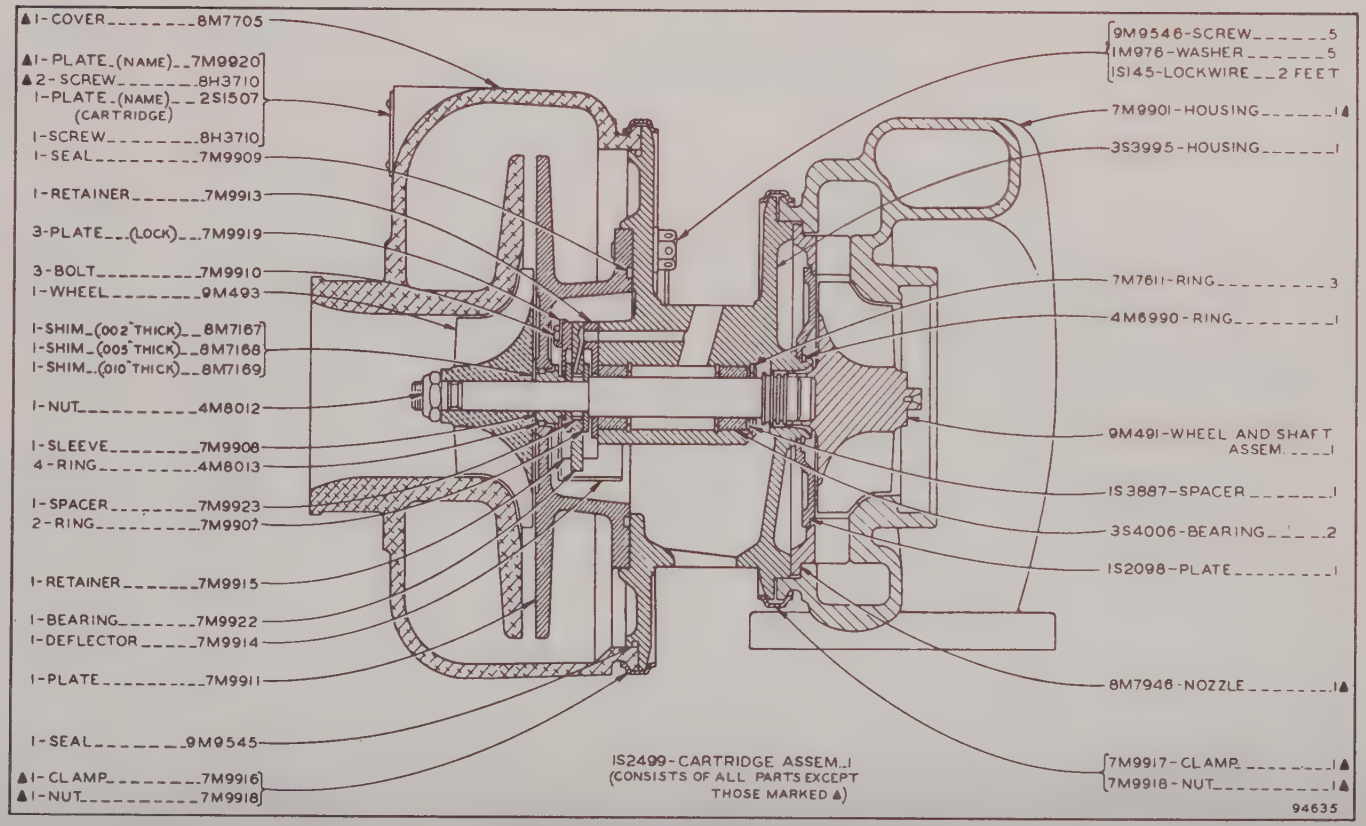




8M9074 TURBOCHARGER ASSEMBLY
Serial No. 46B1558—Up

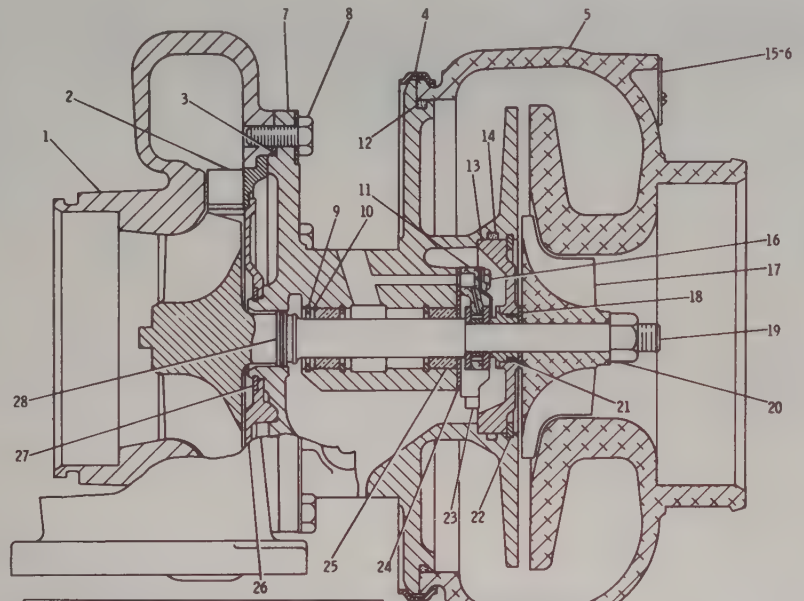
8M9187 TURBOCHARGER ASSEMBLY
Serial No. 46B1558—Up





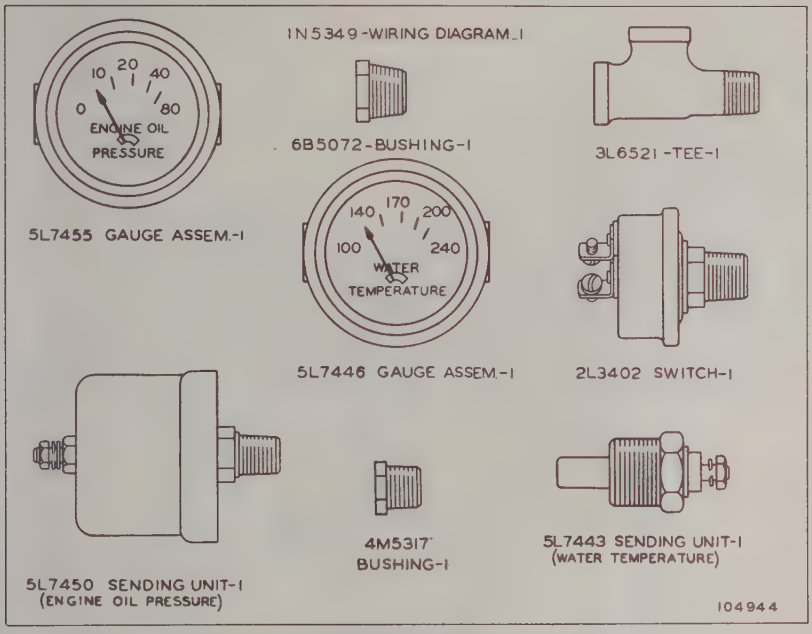
8M9200 TURBOCHARGER ASSEMBLY
Serial No. 46B1558—Up

6N8463 TURBOCHARGER GROUP

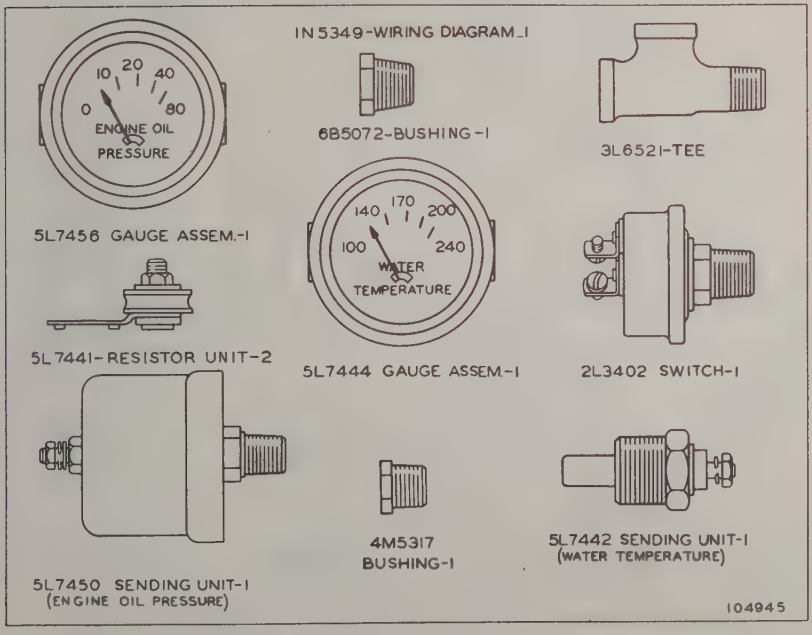


REF. NO.	PART NUMBER	DESCRIPTION	QTY
1	6N8453	HOUSING-------(turbine)--------	1
2	1S6563	NOZZLE----------	1
3	4N4044	GASKET----------	1
4	2S1304	CLAMP----------	1
	7M9918	NUT----------	1
5	8S4048	COVER---------(compressor)-----	1
6	7M9920	PLATE-------(name)----------	1
	8H3710	SCREW----------	2
7	4N4040	CARTRIDGE ASSEM. ---------- (Includes	1
	4N4042	HOUSING----------	1
8	1S7114	BOLT----------	8
	9M9939	PLATE--------(lock)---------	4
▲ 9	7M7611	RING----------	3
▲ 10	1S3887	SLEEVE----------	1
	2S1186	BEARING----------	1
11	2S1185	RING----------	2
▲	7M9923	SPACER----------	1
▲ 12	9M9545	SEAL----------	1
13	2S1305	INSERT----------	1
▲ 14	3S1427	SEAL----------	1
15	2S1507	PLATE---------(name)-------	1
	8H3710	SCREW----------	1
16	7M9910	BOLT----------	3
▲	7M9919	PLATE--------(lock)---------	3
17	2S1302	WHEEL----------	1
▲	8M7167	SHIM--.076 mm(.003 in.) thick	1
▲ 18	8M7168	SHIM--.127 mm(.005 in.) thick	1
▲	8M7169	SHIM--.254 mm(.010 in.) thick	1
19	2S1530	SHAFT AND WHEEL ASSEM. -----	1
▲ 20	6N9683	NUT----------	1
▲	4M8013	RING----------	2
▲ 21	7M9908	SLEEVE----------	1
▲ 22	2S1307	RING----------	1
▲ 23	2S1308	DEFLECTOR----------	1
▲ 24	2S1310	SPACER----------	1
▲ 25	3S5854	BEARING GROUP---------- (Includes Plain & Grooved Bearing)	1
26	9M9938	PLATE----------	1
▲ 27	4M6990	RING----------	1
▲ 28	4S9248	RING----------	2
▲	SMHS6776	FORM--(Bearing Group Installation)	1
		THE FOLLOWING REPAIR KIT IS AVAILABLE:	
	6N7244	KIT--------(cartridge)---------- (Includes Parts Marked ▲)	1

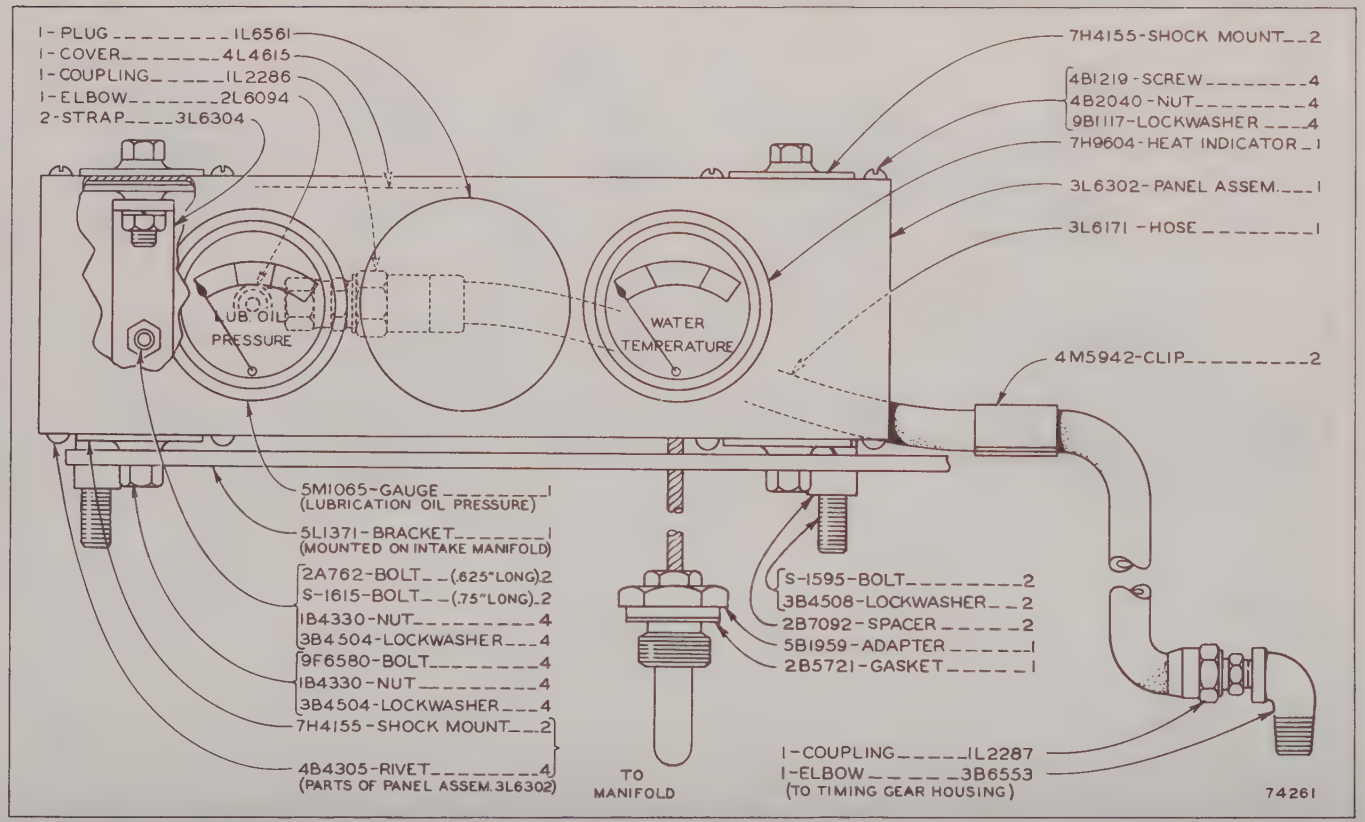
166524



5L9894 INSTRUMENT GROUP—12 Volt
Electrical Gauges

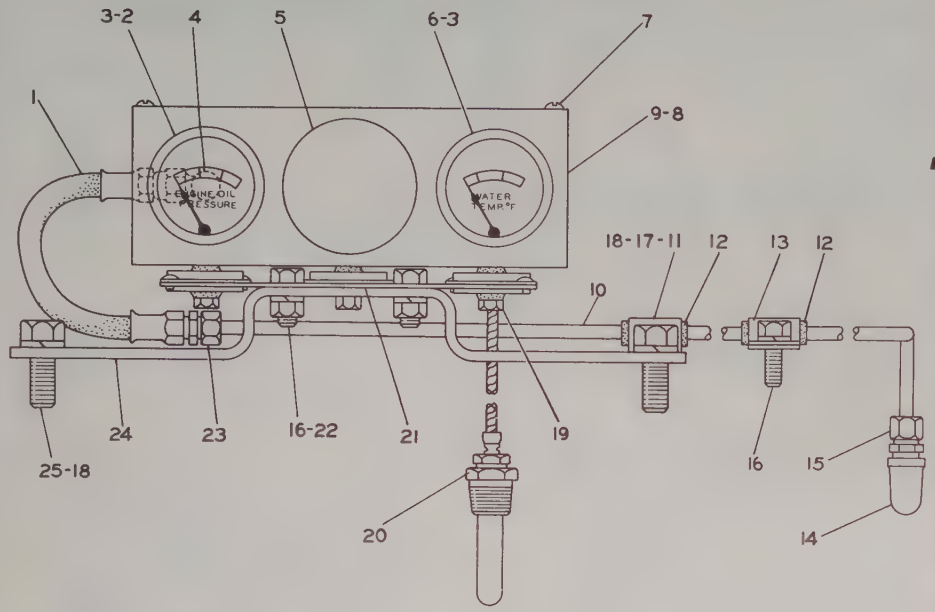


5L9895 INSTRUMENT GROUP—24 and 32 Volt
Electrical Gauges



5L1368 INSTRUMENT PANEL GROUP

Only separate parts serviced. When complete Group is required order 2N4727

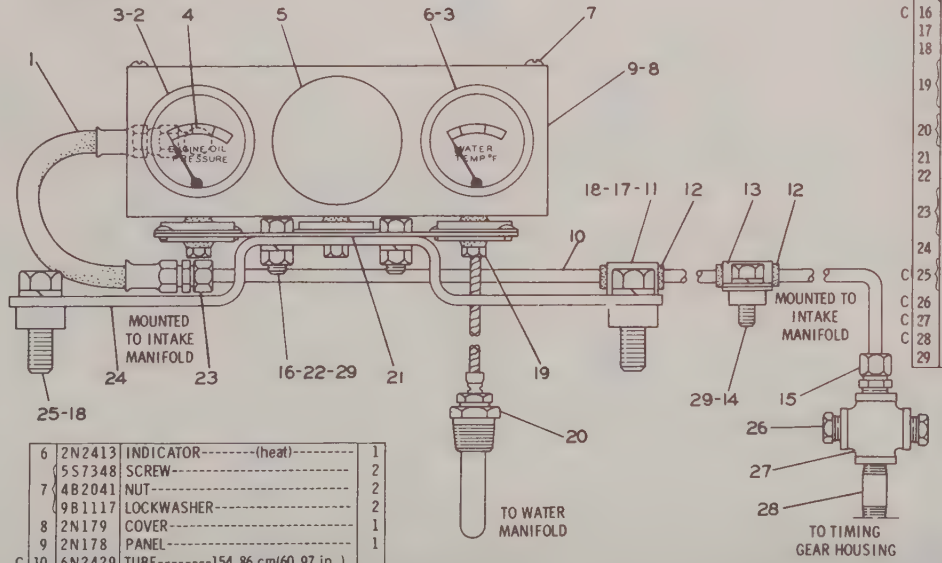


▲ ORDER BY THE FOOT

REF. NO.	PART NUMBER	DESCRIPTION	QTY
1	5L1393	HOSE ASSEM. --(16" long overall)--	1
2	2N2414	GAGE--------(Oil Pressure)-------	1
3	2N794	RETAINER----------	2
4	2L6094	ELBOW----------	1
5	1L6561	PLUG----------	1
6	2N2413	INDICATOR--------(Heat)---------	1
7	5S7348	SCREW----------	2
	4B2041	NUT----------	2
	9B1117	LOCKWASHER----------	2
8	2N179	COVER----------	1
9	2N178	PANEL----------	1
▲ 10	4S8385	TUBE----------6 Ft.	
11	4M5942	CLIP----------	1
12	4B6029	GROMMET----------	2
13	4B418	CLIP----------	1
14	3B6553	ELBOW----------	1
15	4H946	FITTING----------	1
	4H2495	NUT----------	1
	4H2494	SLEEVE----------	1
		(Parts of 4H946 Fitting)	
16	S509	BOLT----------	3
	3B4506	LOCKWASHER----------	3
17	S1620	BOLT----------	1
18	3B4508	LOCKWASHER----------	3
19	9F6580	BOLT----------	3
	1B4330	NUT----------	3
	3B4504	LOCKWASHER----------	3
20	5B1959	ADAPTER----------	1
	2B5721	GASKET----------	1
21	2N5848	BASE ASSEM.----------	1
22	1D4717	NUT----------	2
23	3B8995	FITTING----------	1
	1F1344	NUT----------	1
		(Part of 3B8995 Fitting)	
24	2N4604	BRACKET----------	1
25	S1595	BOLT----------	2

131370

	REF. NO.	PART NUMBER	DESCRIPTION	QTY
C	1	3N7229	HOSE ASSEM. ----40. 64 cm(16 in.)	1
	2	2N2414	GAUGE--------(oil pressure)------	1
	3	2N794	RETAINER----------	2
	4	2L6094	ELBOW----------	1
	5	1L6561	PLUG----------	1



	6	2N2413	INDICATOR--------(heat)----------	1
	7	5S7348	SCREW----------	2
		4B2041	NUT----------	2
		9B1117	LOCKWASHER----------	2
	8	2N179	COVER----------	1
	9	2N178	PANEL----------	1
C	10	6N2429	TUBE--------154. 86 cm(60. 97 in.)	
	11	4M5942	CLIP----------	1

	12	4B6029	GROMMET----------	2
	13	4B418	CLIP----------	1
C	14	S1588	BOLT----------	1
		8B8679	SPACER----------	1
		4H946	FITTING----------	1
	15		(Includes)	
		4H2495	NUT----------	1
		4H2494	SLEEVE----------	1
C	16	S509	BOLT----------	2
	17	S1620	BOLT----------	1
	18	3B4508	LOCKWASHER----------	3
		9F6580	BOLT----------	3
	19	1B4330	NUT----------	3
		3B4504	LOCKWASHER----------	3
		5B1959	ADAPTER----------	1
	20	2B5721	GASKET----------	1
	21	2N5848	BASE ASSEM.----------	1
	22	1D4717	NUT----------	2
		3B8995	FITTING----------	1
	23		(Includes)	
		1F1344	NUT----------	1
	24	2N4604	BRACKET----------	1
C	25	S1585	BOLT----------	2
		5B546	SPACER----------	2
C	26	5M6213	PLUG----------	2
C	27	7B192	CROSS----------	1
C	28	3B7262	NIPPLE----------	1
	29	3B4506	LOCKWASHER----------	3

C INDICATES CHANGE

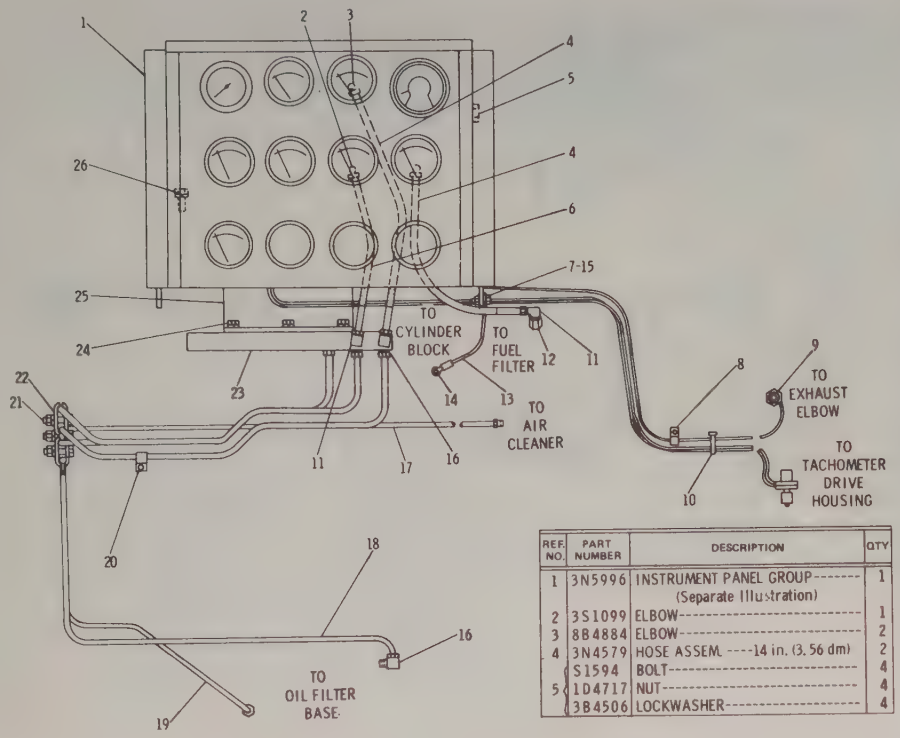
153665

2N4727 INSTRUMENT PANEL GROUP
Serial No. 46B5065—Up

3N7837 INSTRUMENT PANEL GROUP—Type 1

Serial No. 46B5064—Up

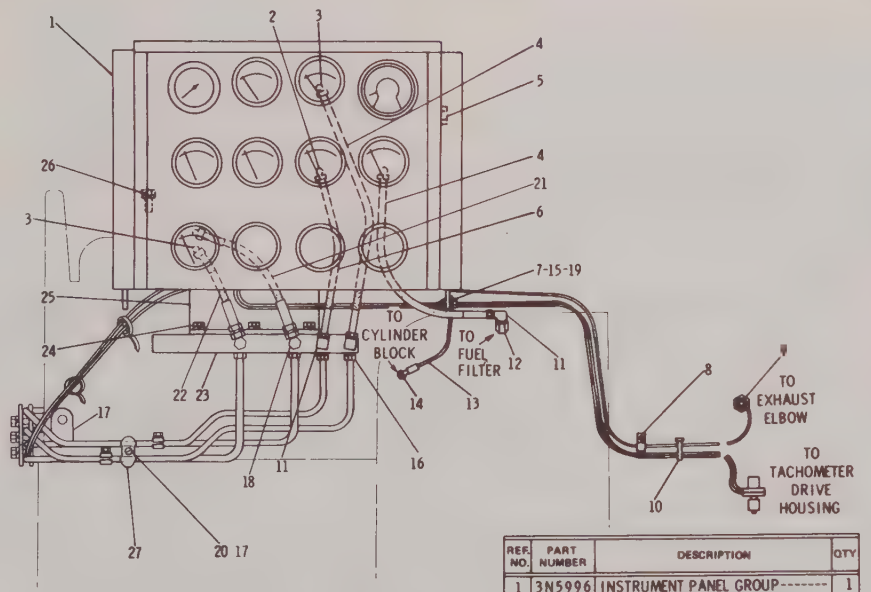
3N5996 Instrument Panel parts are shown on Page 118A-4



REF. NO.	PART NUMBER	DESCRIPTION	QTY
1	3N5996	INSTRUMENT PANEL GROUP (Separate Illustration)	1
2	3S1099	ELBOW	1
3	8B4884	ELBOW	2
4	3N4579	HOSE ASSEM. ----14 in. (3.56 dm)	2
	S1594	BOLT	4
5	1D4717	NUT	4
	3B4506	LOCKWASHER	4
6	6S2274	HOSE ASSEM. ---8.94 in. (2.28 dm)	1
	2N3479	SCREW	1
7	4B2047	NUT	1
	3B4502	LOCKWASHER	1
8	2L9724	CLIP	10
9	3N8278	ADAPTER	1
10	3S2093	STRAP	15
11	2N1287	ELBOW	3
12	3L9924	ORIFICE	1
13	9H5404	WIRE ASSEM. (Includes)	1
▲	5P611	WIRE----3.05 dm(12 in.)	
14	2L8060	TERMINAL	1
15	2L8057	TERMINAL	1
16	5K9243	ELBOW	4
17	3N5921	TUBE ASSEM.	1
18	3N5919	TUBE ASSEM. ------(filtered)------	1
19	3N5917	TUBE ASSEM.	1
20	L2072	CLIP	10
21	S1615	BOLT	3
	1B4330	NUT	3
	3B4504	LOCKWASHER	3
22	6F8868	CLAMP	6
23	3N5878	BLOCK	1
24	5M6214	PLUG	6
	S1617	BOLT	3
	3B4505	LOCKWASHER	3
25	3N5882	SUPPORT ASSEM.	1
26	S1595	BOLT	4
	3B4508	LOCKWASHER	4

▲ ORDER BY THE DECIMETRE

152816



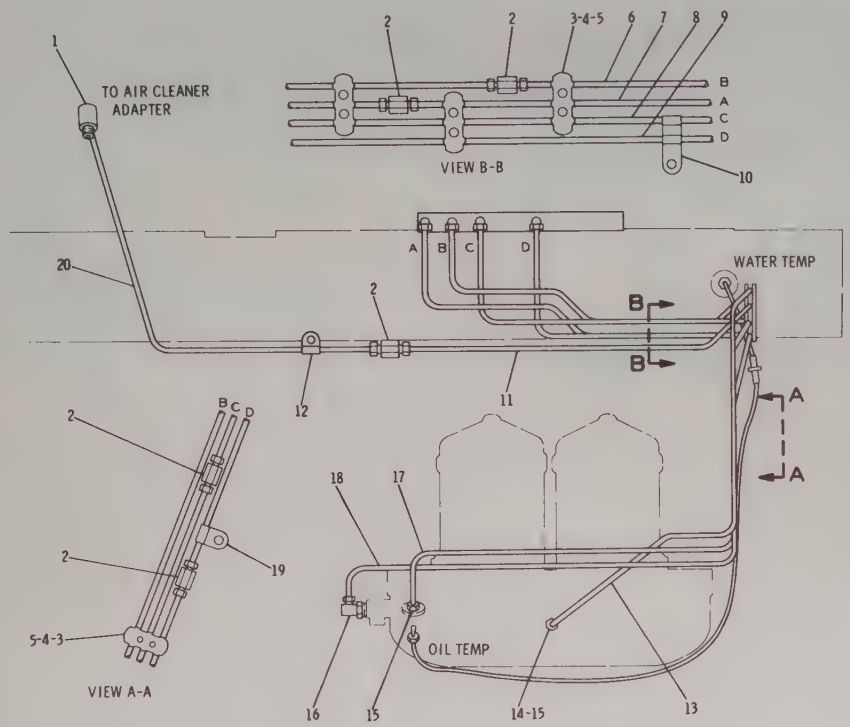
REF. NO.	PART NUMBER	DESCRIPTION	QTY
1	3N5996	INSTRUMENT PANEL GROUP (Separate Illustration)	1
2	3S1099	ELBOW	1
C 3	8B4884	ELBOW	4
4	3N4579	HOSE ASSEM. --3.56 dm(14 in.)--	2
5	S1594	BOLT	4
	1D4717	NUT	4
	3B4506	LOCKWASHER	4

C INDICATES CHANGE

6	6S2274	HOSE ASSEM. --2.28 dm(8.94 in.)--	1
7	2N3479	SCREW	1
	4B2047	NUT	1
8	2L9724	CLIP	10
9	3N8278	ADAPTER	1
10	3S2093	STRAP	15
11	2N1287	ELBOW	3
12	3L9924	ORIFICE	1
13	9H5404	WIRE ASSEM. (Includes)	1
▲	5P611	WIRE-------3.05 dm(12 in.)----	
▲ 14	2L8060	TERMINAL	1
15	2L8057	TERMINAL	1
16	5K9243	ELBOW	4
C 17	4K8179	CLIP	1
C 18	4D6475	UNION	2
C 19	3B4502	LOCKWASHER	3
C 20	5P4939	SCREW ASSEM.	3
C 21	3N7239	HOSE ASSEM.	3
C 22	3N7237	HOSE ASSEM.	1
23	3N5878	BLOCK	1
C	5M6214	PLUG	4
24	S1617	BOLT	3
	3B4505	LOCKWASHER	3
25	3N5882	SUPPORT ASSEM.	1
26	S1595	BOLT	4
	3B4508	LOCKWASHER	4
C 27	9L8715	CLAMP----5.57 mm(.219 in. dia.)-	3
C	9L8716	CLAMP----3.97 mm(.156 in. dia.)-	3

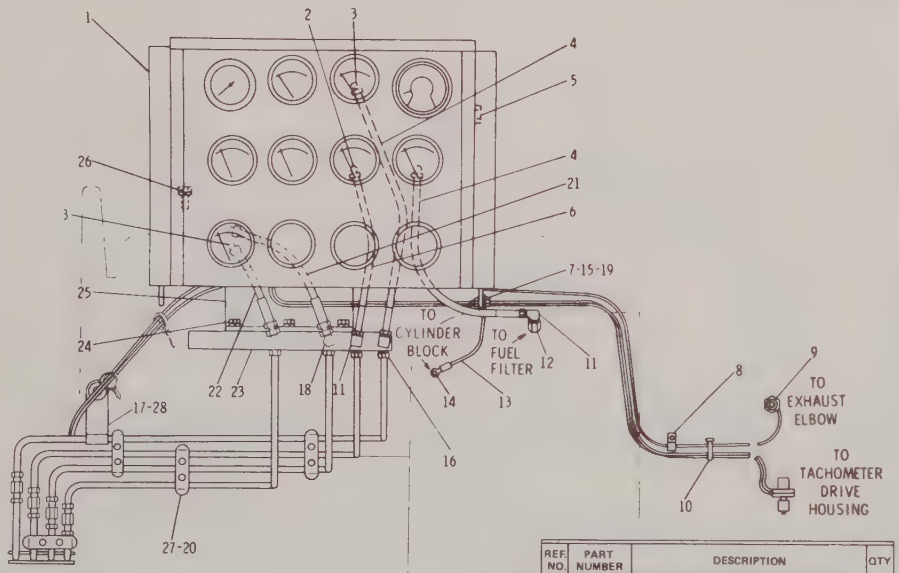
▲ ORDER BY THE DECIMETRE 157332

3N7837 INSTRUMENT PANEL GROUP—Part 1—Type 2
Serial No. 46B5064—Up
3N5996 Instrument Panel parts are shown on Page 118A-4



	REF. NO.	PART NUMBER	DESCRIPTION	QTY.
C	1	1F9369	TEE	1
C	1	9S7720	ELBOW	1
C	2	5K9242	UNION	5
C	3	9L8713	CLAMP	4
C	4	9L8714	CLAMP	4
C	5	5P4939	SCREW ASSEM.	8
C	6	3N5918	TUBE ASSEM.	1
C	7	3N9213	TUBE ASSEM.	1
C	8	3N9224	TUBE ASSEM.	1
C	9	3N5920	TUBE ASSEM.	1
	10	L2072	CLIP (short)	1
C	10	7M8322	CLIP (long)	1
	11	3N5921	TUBE ASSEM.	1
C	12	6H3068	CLIP	1
	13	3N5917	TUBE ASSEM.	1
C	14	9L638	FITTING	1
C	15	6L3616	CONNECTOR	2
C	16	3L1337	ELBOW	1
	17	3N5919	TUBE ASSEM.	1
C	18	3N9214	TUBE ASSEM.	1
C	19	4H8878	CLIP	1
C	20	3N9227	TUBE ASSEM. (Used With Water Cooled Manifold)	1
C	20	5N2938	TUBE ASSEM. (Used With Water Shielded Manifold)	1

156151



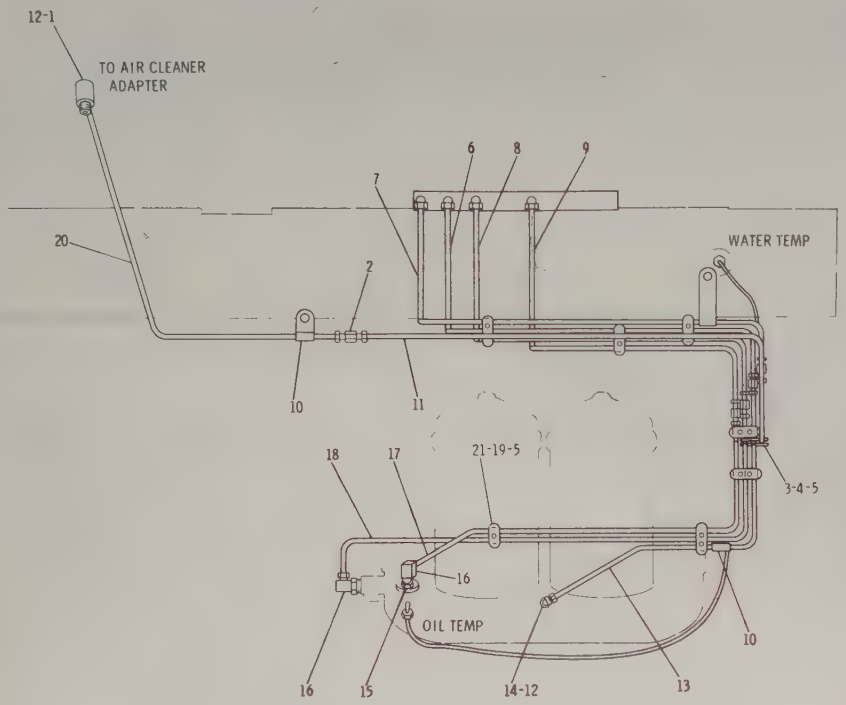
REF. NO.	PART NUMBER	DESCRIPTION	QTY
1	3N5996	INSTRUMENT PANEL GROUP (Separate Illustration)	1
2	3S1099	ELBOW	1
3	8B4884	ELBOW	4
4	3N4579	HOSE ASSEM. ---. 356 m(14 in.)	2
5	S1594	BOLT	4
	1D4717	NUT	4
	3B4506	LOCKWASHER	4
6	6S2274	HOSE ASSEM. --. 228 m(8.94 in.)	1
7	2N3479	SCREW	1
	4B2047	NUT	1
8	2L9724	CLIP	10
9	3N8278	ADAPTER	1
10	3S2093	STRAP	15
11	2N1287	ELBOW	3
12	3L9924	ORIFICE	1
13	9H5404	WIRE ASSEM. (Includes)	1
▲	5P6021	WIRE------. 305 m(12 in.)	
▲ 14	2L8060	TERMINAL	1
15	2L8057	TERMINAL	1
16	5K9243	ELBOW	4
C 17	4M1149	CLIP	1
18	4D6475	UNION	2
19	3B4502	LOCKWASHER	3
20	5P4939	SCREW ASSEM.	12
21	3N7239	HOSE ASSEM.	3
22	3N7237	HOSE ASSEM.	1
23	3N5878	BLOCK	1
	5M6214	PLUG	4
24	S1617	BOLT	3
	3B4505	LOCKWASHER	3
25	3N5882	SUPPORT ASSEM.	1
26	S1595	BOLT	4
	3B4508	LOCKWASHER	4
C 27	9L8713	CLAMP------5. 57 mm(. 219 in. dia)	6
C	9L8714	CLAMP------3. 97 mm(. 156 in. dia)	6
C 28	4S9191	WASHER	1

C INDICATES CHANGE

▲ ORDER BY THE METRE

213014

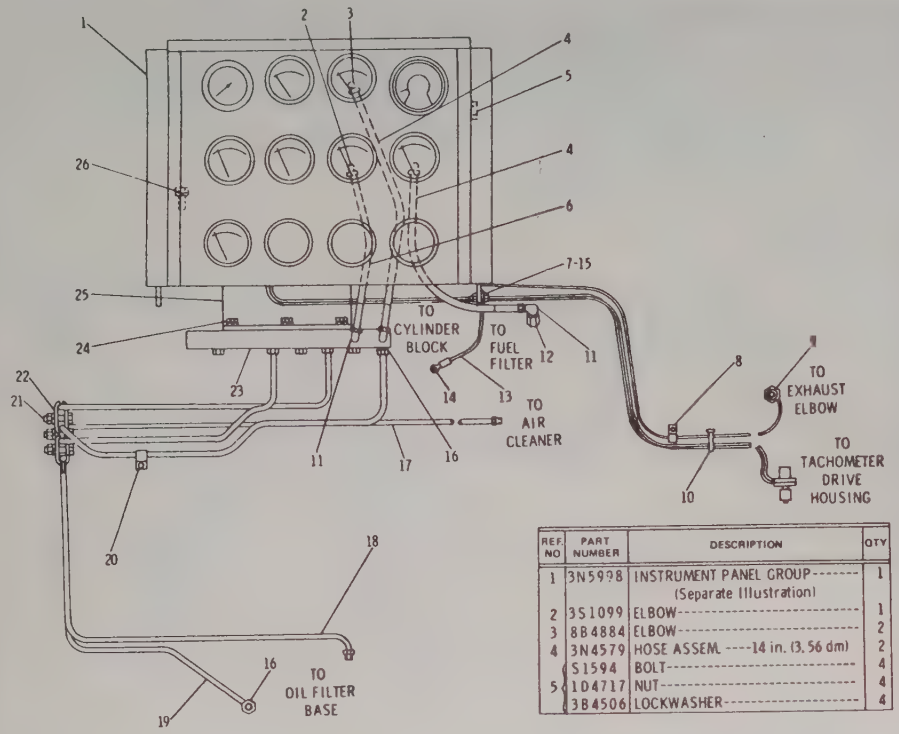
3N7837 INSTRUMENT PANEL GROUP—Part 1—Type 3
Serial No. 46B5064—Up
3N5996 Instrument Panel parts are shown on Page 118A-4



REF. NO.	PART NUMBER	DESCRIPTION	QTY
1	1F9369	TEE	1
2	5K9242	UNION	5
C 3	9L8713	CLAMP	2
C 4	9L8714	CLAMP	2
C 5	5P4939	SCREW ASSEM.	5
6	3N5918	TUBE ASSEM.	1
7	3N9213	TUBE ASSEM.	1
8	3N9224	TUBE ASSEM.	1
9	3N5920	TUBE ASSEM.	1
C 10	L2072	CLIP-----(short)----------	2
11	3N5921	TUBE ASSEM.	1
C 12	9S7720	ELBOW	2
13	3N5917	TUBE ASSEM.	1
14	9L638	FITTING	1
C 15	6K6967	ADAPTER	1
C 16	3L1337	ELBOW	2
17	3N5919	TUBE ASSEM.	1
18	3N9214	TUBE ASSEM.	1
C 19	9L8716	CLAMP----------3.97 mm(.156 in.	1
20	3N9227	TUBE ASSEM. (Used With Water Cooled Manifold)	1
	5N2938	TUBE ASSEM. (Used With Water Shielded Manifold)	1
C 21	9L8715	CLAMP-----5.57 mm(.219 in dia.)	1

C INDICATES CHANGE 213015

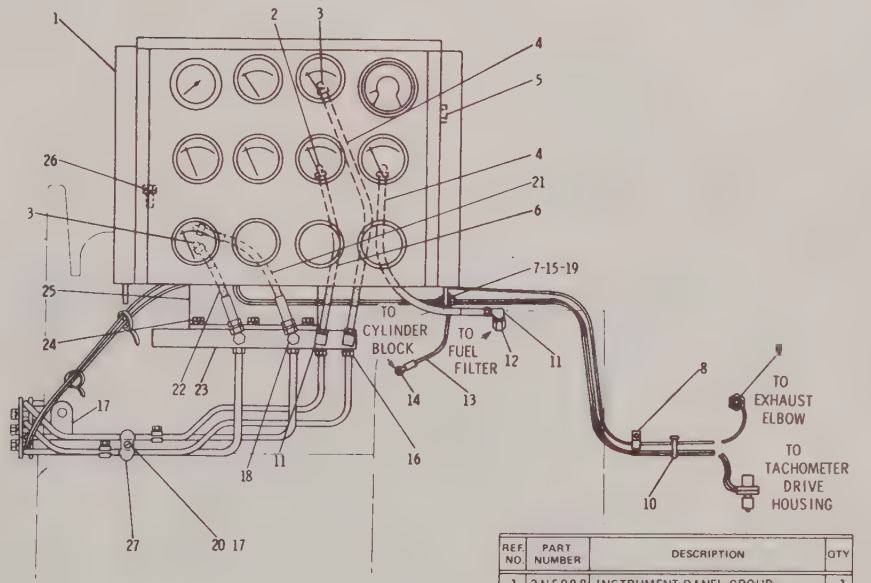
3N7838 INSTRUMENT PANEL GROUP—Type 1
Serial No. 46B5064—Up
3N5998 Instrument Panel parts are shown on Page 118A-5



REF. NO	PART NUMBER	DESCRIPTION	QTY
1	3N5998	INSTRUMENT PANEL GROUP (Separate Illustration)	1
2	3S1099	ELBOW	1
3	8B4884	ELBOW	2
4	3N4579	HOSE ASSEM. ---14 in. (3.56 dm)	2
5	S1594	BOLT	4
	1D4717	NUT	4
	3B4506	LOCKWASHER	4
6	6S2274	HOSE ASSEM. ---8.94 in. (2.28 dm)	1
7	2N3479	SCREW	1
	4B2047	NUT	1
	3B4502	LOCKWASHER	1
8	2L9724	CLIP	10
9	3N8278	ADAPTER	1
10	3S2093	STRAP	15
11	2N1287	ELBOW	3
12	3L9924	ORIFICE	1
13	9H5404	WIRE ASSEM. (Includes)	1
▲	5P611	WIRE---3.05 dm(12 in.)	
14	2L8060	TERMINAL	1
15	2L8057	TERMINAL	1
16	5K9243	ELBOW	4
17	3N5921	TUBE ASSEM.	1
18	3N5919	TUBE ASSEM. ---(filtered)---	1
19	3N5917	TUBE ASSEM.	1
20	L2072	CLIP	10
21	S1615	BOLT	3
	1B4330	NUT	3
	3B4504	LOCKWASHER	3
22	6F8868	CLAMP	6
23	3N5878	BLOCK	1
	5M6214	PLUG	6
24	S1617	BOLT	3
	3B4505	LOCKWASHER	3
25	3N5882	SUPPORT ASSEM.	1
26	S1595	BOLT	4
	3B4508	LOCKWASHER	4

▲ ORDER BY THE DECIMETRE

152823



REF. NO.	PART NUMBER	DESCRIPTION	QTY
1	3N5998	INSTRUMENT PANEL GROUP (Separate Illustration)	1
2	3S1099	ELBOW	1
C 3	8B4884	ELBOW	4
4	3N4579	HOSE ASSEM. ---3.56 dm(14 in.)	
	S1594	BOLT	4
5	1D4717	NUT	4
	3B4506	LOCKWASHER	4
6	6S2274	HOSE ASSEM. --2.28 dm(8.94 in.)--	1
7	2N3479	SCREW	1
	4B2047	NUT	1
8	2L9724	CLIP	10
9	3N8278	ADAPTER	1
10	3S2093	STRAP	15
11	2N1287	ELBOW	3
12	3L9924	ORIFICE	1
13	9H5404	WIRE ASSEM. (Includes)	1
▲	5P6021	WIRE---------.31 m(12 in.) --	
14	2L8060	TERMINAL	1
15	2L8057	TERMINAL	1
16	5K9243	ELBOW	4
C 17	4K8179	CLIP	1
C 18	4D6475	UNION	2
C 19	3B4502	LOCKWASHER	3
C 20	5P4939	SCREW ASSEM.	3
C 21	3N7239	HOSE ASSEM.	1
C 22	3N7237	HOSE ASSEM.	1
23	3N5878	BLOCK	1
C	5M6214	PLUG	4
24	S1617	BOLT	3
	3B4505	LOCKWASHER	3
25	3N5882	SUPPORT ASSEM.	1
26	S1595	BOLT	4
	3B4508	LOCKWASHER	4
C	9L8715	CLAMP----5.57 mm(.219 in. dia.)-	3
C 27	9L8716	CLAMP----3.97 mm(.156 in. dia.)-	3

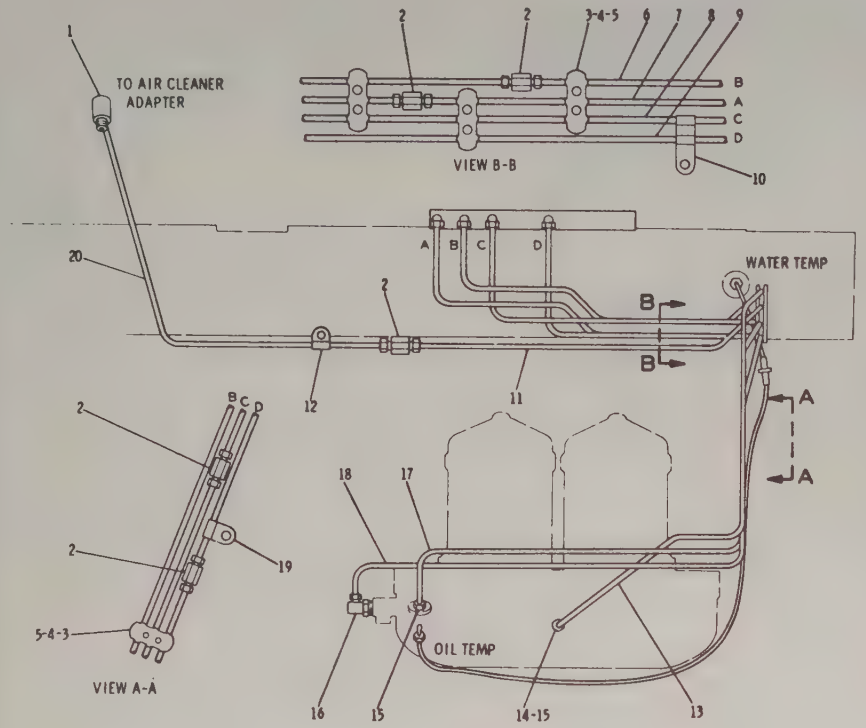
C INDICATES CHANGE

▲ ORDER BY THE METRE

156152

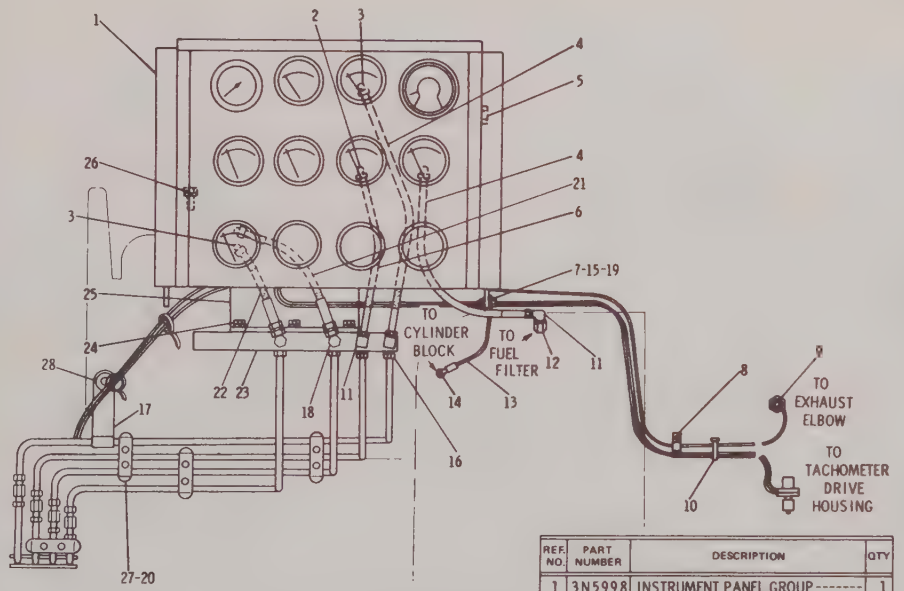
3N7838 INSTRUMENT PANEL GROUP—L.H. Side View—Type 2
Serial No. 46B5064—Up
3N5998 Instrument Panel parts are shown on Page 118A-4b & 118A-5

3N7838 INSTRUMENT PANEL GROUP—R.H. Side View—Type 2
Serial No. 46B5064—Up



REF. NO.	PART NUMBER	DESCRIPTION	QTY
C 1	1F9369	TEE	1
C 1	9S7720	ELBOW	1
C 2	5K9242	UNION	5
C 3	9L8713	CLAMP	4
C 4	9L8714	CLAMP	4
C 5	5P4939	SCREW ASSEM.	8
C 6	3N5918	TUBE ASSEM.	1
C 7	3N9213	TUBE ASSEM.	1
C 8	3N9224	TUBE ASSEM.	1
C 9	3N5920	TUBE ASSEM.	1
C 10	1L2072	CLIP—(short)	1
C 10	7M8322	CLIP—(long)	1
11	3N5921	TUBE ASSEM.	1
C 12	6H3068	CLIP	1
13	3N5917	TUBE ASSEM.	1
C 14	9L638	FITTING	1
C 15	6L3616	CONNECTOR	2
C 16	3L1337	ELBOW	1
17	3N5919	TUBE ASSEM.	1
C 18	3N9214	TUBE ASSEM.	1
C 19	4H8878	CLIP	1
C 20	3N9227	TUBE ASSEM. (Used With Water Cooled Manifold)	1
C 20	5N2938	TUBE ASSEM. (Used With Water Shielded Manifold)	1

158074



REF. NO.	PART NUMBER	DESCRIPTION	QTY
1	3N5998	INSTRUMENT PANEL GROUP (Separate Illustration)	1
2	3S1099	ELBOW	1
3	8B4884	ELBOW	4
4	3N4579	HOSE ASSEM. -35.60 cm(14 in.)	
5	S1594	BOLT	4
	1D4717	NUT	4
	3B4506	LOCKWASHER	4
6	6S2274	HOSE ASSEM. -22.80 cm(8.94 in.)	1
7	2N3479	SCREW	1
	4B2047	NUT	1
8	2L9724	CLIP	10
9	3N8278	ADAPTER	1
10	3S2093	STRAP	15
11	2N1287	ELBOW	3
12	3L9924	ORIFICE	1
13	9H5404	WIRE ASSEM. (Includes)	1
▲	5P6021	WIRE -.31 m(12 in.)	
14	2L8060	TERMINAL	1
15	2L8057	TERMINAL	1
16	5K9243	ELBOW	4
C 17	4M1149	CLIP	1
18	4D6475	UNION	2
19	3B4502	LOCKWASHER	3
C 20	5P4939	SCREW ASSEM.	12
21	3N7239	HOSE ASSEM.	1
22	3N7237	HOSE ASSEM.	1
23	3N5878	BLOCK	1
	5M6214	PLUG	4
24	S1617	BOLT	3
	3B4505	LOCKWASHER	3
25	3N5882	SUPPORT ASSEM.	1
26	S1595	BOLT	4
	3B4508	LOCKWASHER	4
C 27	9L8713	CLAMP-5.57 mm(.219 in. dia.)	6
C	9L8714	CLAMP-3.97 mm(.156 in. dia.)	6
C 28	4S9191	WASHER	1

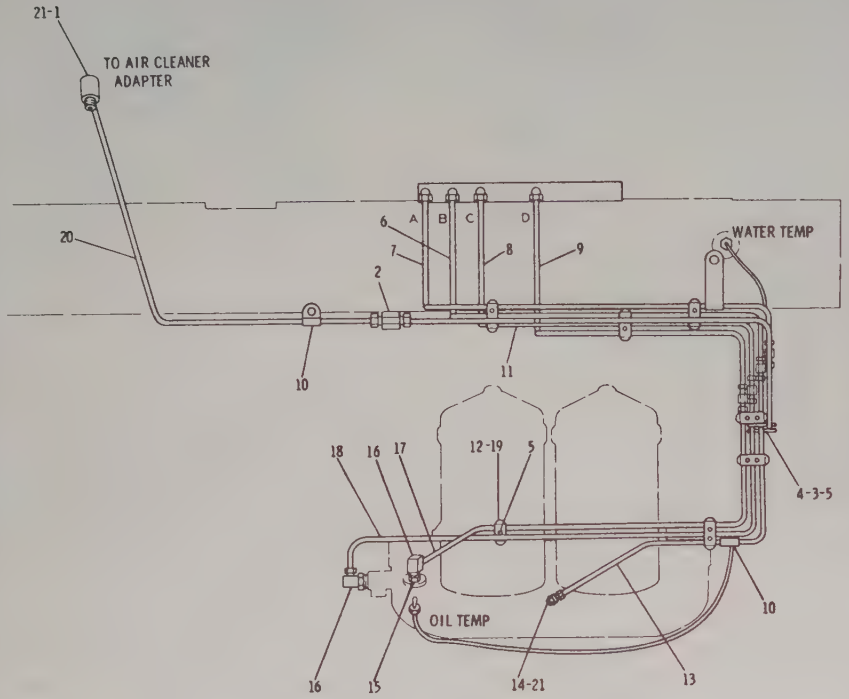
C INDICATES CHANGE

▲ ORDER BY THE METRE

213016

3N7838 INSTRUMENT PANEL GROUP—L.H. Side View—Type 3
Serial No. 46B5064—Up
3N5998 Instrument Panel parts are shown on Page 118A-5

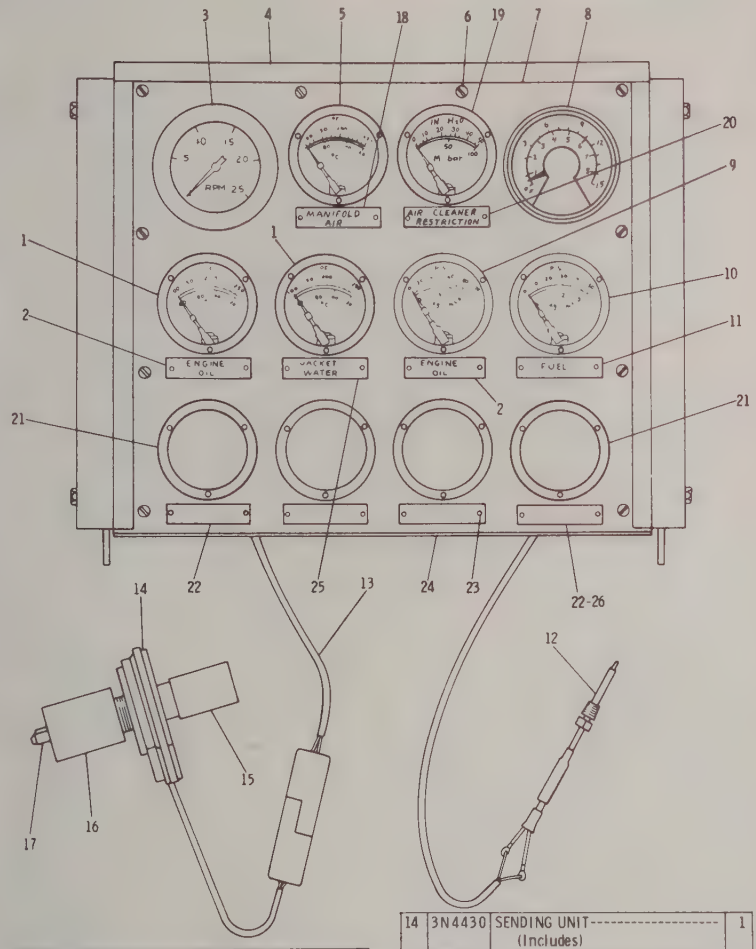
3N7838 INSTRUMENT PANEL GROUP—R.H. Side View—Type 3
Serial No. 46B5064—Up



	REF. NO	PART NUMBER	DESCRIPTION	QTY
	1	1F9369	TEE	1
	2	5K9242	UNION	5
C	3	9L8713	CLAMP	2
C	4	9L8714	CLAMP	2
C	5	5P4939	SCREW ASSEM.	5
	6	3N5918	TUBE ASSEM.	1
	7	3N9213	TUBE ASSEM.	1
	8	3N9224	TUBE ASSEM.	1
	9	3N5920	TUBE ASSEM.	1
C	10	L2072	CLIP	2
	11	3N5921	TUBE ASSEM.	1
C	12	9L8715	CLAMP—5.57 mm(.219 in.) dia.	1
	13	3N5917	TUBE ASSEM.	1
	14	9L638	FITTING	1
C	15	6K6967	ADAPTER	1
C	16	3L1337	ELBOW	2
	17	3N5919	TUBE ASSEM.	1
	18	3N9214	TUBE ASSEM.	1
C	19	9L8716	CLAMP—3.97 mm(.156 in.) dia.	1
	20	3N9227	TUBE ASSEM. (Used with water cooled manifold)	1
		5N2938	TUBE ASSEM. (Used with water shielded manifold)	1
C	21	9S7720	ELBOW	2

C INDICATES CHANGE

213017

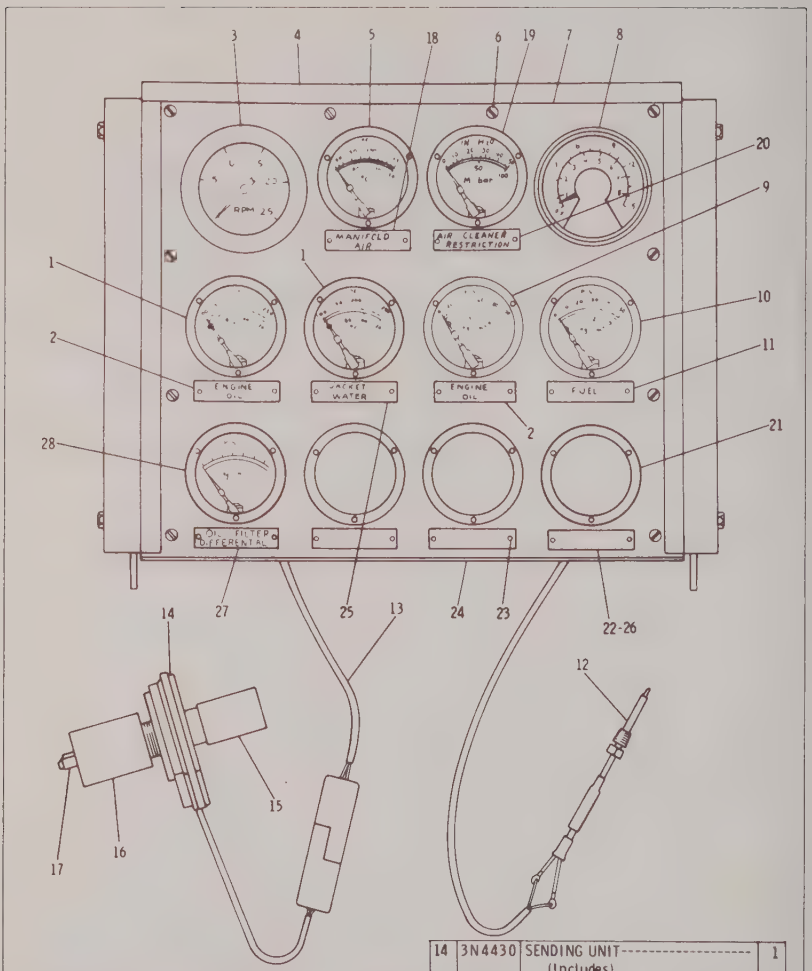


REF. NO	PART NUMBER	DESCRIPTION	QTY
1	3N4412	GAUGE--(oil and water temperature)	2
2	3N5986	NAMEPLATE----(engine oil)--------	2
3	3N7288	TACHOMETER----------	1
4	3N8268	BOX GROUP---------- (Separate Illustration)	1
5	3N4415	GAUGE----------	1
6	3N4427	SCREW----------	10
7	3N5995	PANEL----------	1
8	3N7012	PYROMETER----------	1
9	3N4414	GAUGE-----(oil pressure)---------	1
10	3N4413	GAUGE----(fuel pressure)--------	1
11	3N5988	NAMEPLATE--(fuel pressure)------	1
12	3N5991	THERMOCOUPLE----------	1
13	3N4431	HARNESS ASSEM. ----------	1

14	3N4430	SENDING UNIT---------- (Includes)	1
15	3N6917	CAP----------	1
	1H1023	SEAL----------	2
16	3N6916	NUT----------	1
17	3N6918	TANG----------	1
18	3N7191	NAMEPLATE---manifold air)-------	1
19	3N5994	GAUGE-----(vaccum)----------	1
20	3N5985	NAMEPLATE---(air cleaner)--------	1
21	3N7212	PLUG ASSEM. ----------	4
22	3N7193	NAMEPLATE----(use as required)---	4
23	2F808	SCREW----------	20
24	3N8269	STRIP----------	2
25	3N5987	NAMEPLATE---(jacket water)-------	1
26	3N5990	NAMEPLATE-(use with ammeter)---	1

152818

3N5996 INSTRUMENT PANEL GROUP—Type 1
Serial No. 46B5064—Up. Part of 3N7837 Instrument Panel Group shown on Pages 118A-2, 118A-2a & 118A-2c. 3N8268 Box parts are shown on Page 118A-6

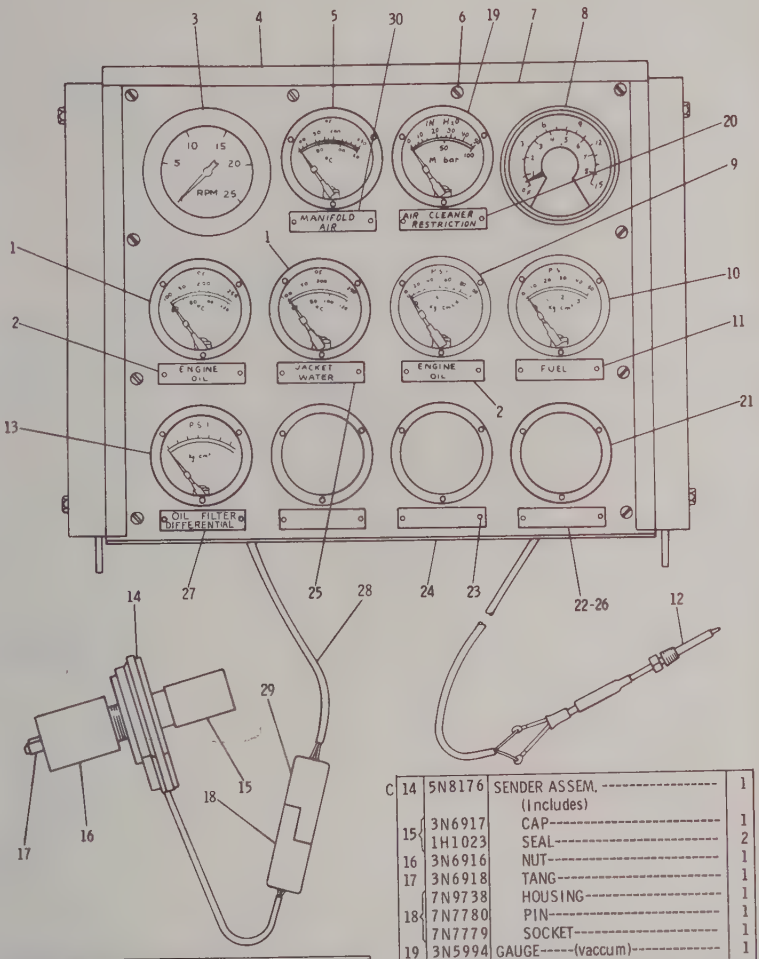


REF NO	PART NUMBER	DESCRIPTION	QTY
1	3N4412	GAUGE--(oil and water temperature)	2
2	3N5986	NAMEPLATE----(engine oil)--------	2
3	3N7288	TACHOMETER----------	1
4	3N8268	BOX GROUP---------- (Separate Illustration)	1
5	3N4415	GAUGE----------	1
6	3N4427	SCREW----------	10
7	3N5995	PANEL----------	1
8	3N7012	PYROMETER----------	1
9	3N4414	GAUGE-----(oil pressure)---------	1
10	3N4413	GAUGE----(fuel pressure)--------	1
11	3N5988	NAMEPLATE--(fuel pressure)------	1
12	3N5991	THERMOCOUPLE----------	1
13	3N4431	HARNESS ASSEM.----------	1
14	3N4430	SENDING UNIT---------- (Includes)	1
15	3N6917	CAP----------	1
	1H1023	SEAL----------	2
16	3N6916	NUT----------	1
17	3N6918	TANG----------	1
18	3N7191	NAMEPLATE--(manifold air)-------	1
19	3N5994	GAUGE-----(vaccum)----------	1
20	3N5985	NAMEPLATE---(air cleaner)--------	1
C 21	3N7212	PLUG ASSEM.----------	3
C 22	3N7193	NAMEPLATE----(use as required)---	3
23	2F808	SCREW----------	20
24	3N8269	STRIP----------	2
25	3N5987	NAMEPLATE---(jacket water)-------	1
26	3N5990	NAMEPLATE-(use with ammeter)---	1
C 27	3N5989	NAMEPLATE--(oil filter differential)	1
C 28	3N5993	GAUGE-------(oil filter)----------	1

C INDICATES CHANGE

156149

3N5996 INSTRUMENT PANEL GROUP—Type 2
Serial No. 46B5064—Up. Part of 3N7837 Instrument Panel Group shown on Page 118A-2, 118A-2a & 118A-2c. 3N8268 Box parts are shown on Page 118A-6



REF. NO.	PART NUMBER	DESCRIPTION	QTY
1	3N4412	GAUGE--(oil and water temperature)	2
2	3N5986	NAMEPLATE----(engine oil)--------	2
3	3N7288	TACHOMETER----------	1
4	3N8268	BOX GROUP---------- (Separate Illustration)	1
5	3N4415	GAUGE----------	1
6	3N4427	SCREW----------	10
7	3N5995	PANEL----------	1
8	3N7012	PYROMETER----------	1
9	3N4414	GAUGE-----(oil pressure)---------	1
10	3N4413	GAUGE----(fuel pressure)--------	1
11	3N5988	NAMEPLATE--(fuel pressure)------	1
12	3N5991	THERMOCOUPLE----------	1
13	3N5993	GAUGE----(oil filter)----------	1

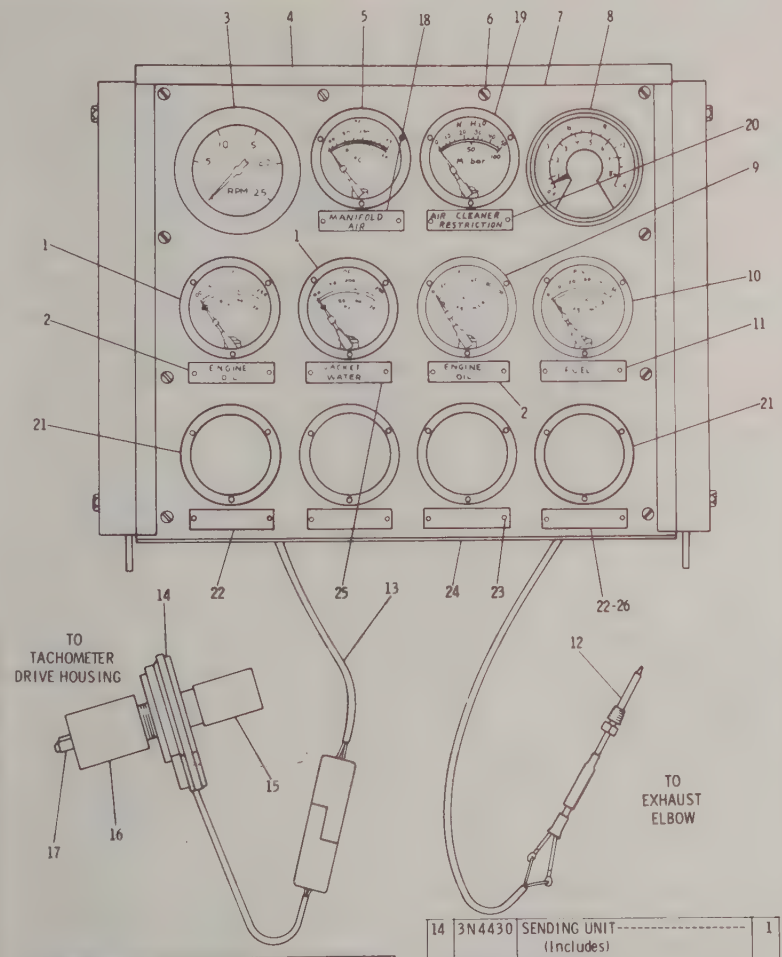
▲ ORDER BY THE METER

	REF. NO.	PART NUMBER	DESCRIPTION	QTY
C	14	5N8176	SENDER ASSEM. ---------- (Includes)	1
	15	3N6917	CAP----------	1
		1H1023	SEAL----------	2
	16	3N6916	NUT----------	1
	17	3N6918	TANG----------	1
	18	7N9738	HOUSING----------	1
		7N7780	PIN----------	1
		7N7779	SOCKET----------	1
	19	3N5994	GAUGE-----(vaccum)----------	1
	20	3N5985	NAMEPLATE----(air cleaner)------	1
	21	3N7212	PLUG ASSEM. ----------	3
	22	3N7193	NAMEPLATE----(use as required)-	3
	23	2F808	SCREW----------	20
	24	3N8269	STRIP----------	2
	25	3N5987	NAMEPLATE----(jacket water)------	1
	26	3N5990	NAMEPLATE---(use with ammeter)	1
	27	3N5989	NAMEPLATE---(oil filter differential)	1
C ▲	28	5N8209	HARNESS ASSEM. ---------- (Includes)	1
		5P5677	WIRE ----------(18 gauge)	
		7N9017	TERMINAL----------	2
	29	7N9737	HOUSING----------	1
		7N7780	PIN----------	1
		7N7779	SOCKET----------	1
	30	3N7191	NAMEPLATE----(manifold air)-----	1

C INDICATES CHANGE

232037

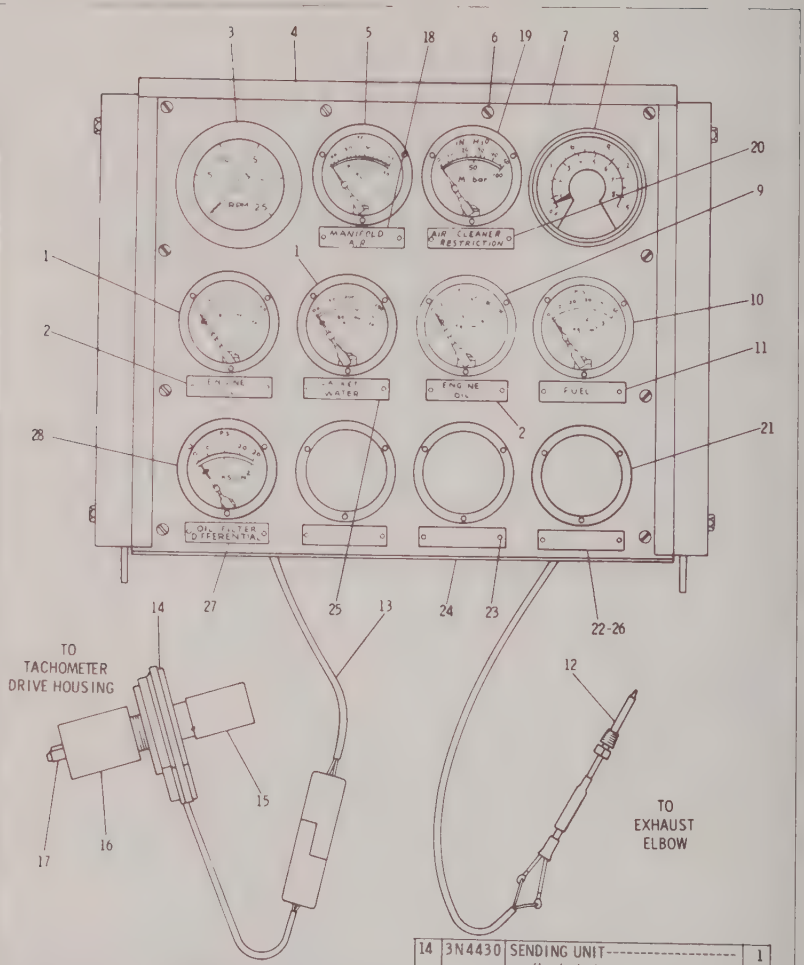
3N5996 INSTRUMENT PANEL GROUP—Type 3
Serial No. 46B5064—Up. Part of 3N7837 Instrument Panel Group shown on Page 118A-2, 118A-2a & 118A-2c. 3N8268 Box parts are shown on Page 118A-6



REF NO	PART NUMBER	DESCRIPTION	QTY
1	3N4412	GAUGE--(oil and water temperature)	2
2	3N5986	NAMEPLATE----(engine oil)--------	2
3	3N7288	TACHOMETER----------	1
4	3N8268	BOX GROUP---------- (Separate Illustration)	1
5	3N4428	GAUGE----------	1
6	3N4427	SCREW----------	10
7	3N5995	PANEL----------	1
8	3N7012	PYROMETER----------	1
9	3N4414	GAUGE-----(oil pressure)---------	1
10	3N4413	GAUGE----(fuel pressure)--------	1
11	3N5988	NAMEPLATE--(fuel pressure)------	1
12	3N5991	THERMOCOUPLE----------	1
13	3N4431	HARNESS ASSEM. ----------	1
14	3N4430	SENDING UNIT---------- (Includes)	1
15	3N6917	CAP----------	1
	1H1023	SEAL----------	2
16	3N6916	NUT----------	1
17	3N6918	TANG----------	1
18	3N7191	NAMEPLATE---manifold air)-------	1
19	3N5994	GAUGE-----(vaccum)----------	1
20	3N5985	NAMEPLATE---(air cleaner)--------	1
21	3N7212	PLUG ASSEM. ----------	4
22	3N7193	NAMEPLATE----(use as required)---	4
23	2F808	SCREW----------	20
24	3N8269	STRIP----------	2
25	3N5987	NAMEPLATE---(jacket water)-------	1
26	3N5990	NAMEPLATE-(use with ammeter)---	1

152813

3N5998 INSTRUMENT PANEL GROUP—Type 1
Serial No. 46B5064—Up. Part of 3N7838 Instrument Panel Group shown on Pages 118A-3, 118A-3a & 118A-3c. 3N8268 Box parts are shown on Page 118A-6

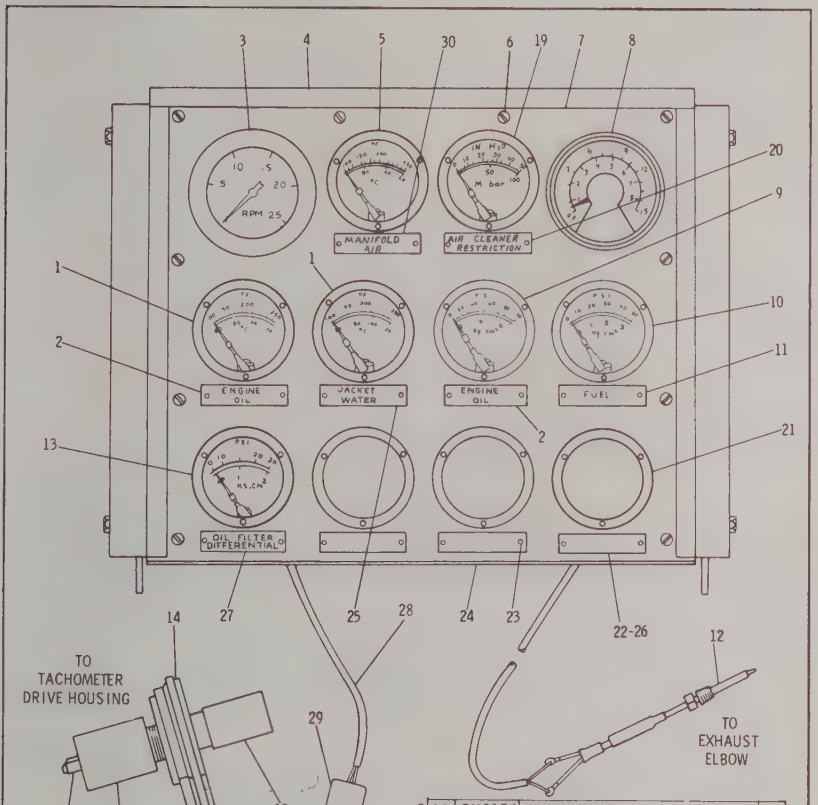


REF. NO.	PART NUMBER	DESCRIPTION	QTY
1	3N4412	GAUGE--(oil and water temperature)	2
2	3N5986	NAMEPLATE----(engine oil)--------	2
3	3N7288	TACHOMETER----------	1
4	3N8268	BOX GROUP---------- (Separate Illustration)	1
5	3N4428	GAUGE----------	1
6	3N4427	SCREW----------	10
7	3N5995	PANEL----------	1
8	3N7012	PYROMETER----------	1
9	3N4414	GAUGE-----(oil pressure)---------	1
10	3N4413	GAUGE----(fuel pressure)---- ---	1
11	3N5988	NAMEPLATE--(fuel pressure)------	1
12	3N5991	THERMOCOUPLE----------	1
13	3N4431	HARNESS ASSEM. ----------	1
14	3N4430	SENDING UNIT---------- (Includes)	1
15	3N6917	CAP----------	1
	1H1023	SEAL----------	2
16	3N6916	NUT----------	1
17	3N6918	TANG----------	1
18	3N7191	NAMEPLATE---manifold air)-------	1
19	3N5994	GAUGE-----(vaccum)----------	1
20	3N5985	NAMEPLATE----(air cleaner)--------	1
C 21	3N7212	PLUG ASSEM. ----------	3
C 22	3N7193	NAMEPLATE----(use as required)---	3
23	2F808	SCREW----------	20
24	3N8269	STRIP----------	2
25	3N5987	NAMEPLATE---(jacket water)-------	1
26	3N5990	NAMEPLATE-(use with ammeter)---	1
C 27	3N5989	NAMEPLATE------(oil filter)------	1
C 28	3N5993	GAUGE----------(oil filter)-------	1

C INDICATES CHANGE

156150

3N5998 INSTRUMENT PANEL GROUP—Type 2
Serial No. 46B5064—Up. Part of 3N7838 Instrument Panel Group shown on Pages 118A-3, 118A-3a & 118A-3c. 3N8268 Box parts are shown on Page 118A-6



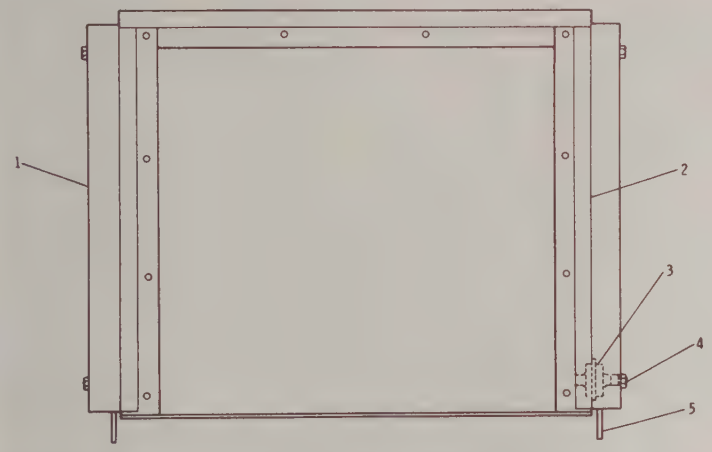
REF. NO.	PART NUMBER	DESCRIPTION	QTY
1	3N4412	GAUGE--(oil and water temperature)	2
2	3N5986	NAMEPLATE----(engine oil)--------	2
3	3N7288	TACHOMETER----------	1
4	3N8268	BOX GROUP---------- (Separate Illustration)	1
5	3N4428	GAUGE----------	1
6	3N4427	SCREW----------	10
7	3N5995	PANEL----------	1
8	3N7012	PYROMETER----------	1
9	3N4414	GAUGE-----(oil pressure)---------	1
10	3N4413	GAUGE----(fuel pressure)--------	1
11	3N5988	NAMEPLATE--(fuel pressure)------	1
12	3N5991	THERMOCOUPLE----------	1
13	3N5993	GAUGE-------(oil filter)----------	1

	REF. NO.	PART NUMBER	DESCRIPTION	QTY
C	14	5N8176	SENDER ASSEM. ---------- (Includes)	1
	15	3N6917	CAP----------	1
		1H1023	SEAL----------	2
	16	3N6916	NUT----------	1
	17	3N6918	TANG----------	1
	18	7N9738	HOUSING----------	1
		7N7780	PIN----------	1
		7N7779	SOCKET----------	1
	19	3N5994	GAUGE----(vaccum)----------	1
	20	3N5985	NAMEPLATE---(air cleaner)-----	1
	21	3N7212	PLUG ASSEM. ----------	3
	22	3N7193	NAMEPLATE---(use as required)--	3
	23	2F808	SCREW----------	20
	24	3N8269	STRIP----------	2
	25	3N5987	NAMEPLATE----(jacket water)-----	1
	26	3N5990	NAMEPLATE-(use with ammeter)--	1
	27	3N5989	NAMEPLATE----(oil filter)--------	1
C		5N8209	HARNESS ASSEM. ---------- (Includes)	1
▲	28	5P5677	WIRE---------(18 gauge)	1
		7N9017	TERMINAL----------	2
	29	7N9737	HOUSING----------	1
		7N7780	PIN----------	1
		7N7779	SOCKET----------	1
	30	3N7191	NAMEPLATE-(manifold air)------	1

C INDICATES CHANGE ▲ ORDER BY THE METER

232038

3N5998 INSTRUMENT PANEL GROUP—Type 3
Serial No. 46B5064—Up. Part of 3N7838 Instrument Panel Group shown on Pages 118A-3, 118A-3a & 118A-3c. 3N8268 Box parts are shown on Page 118A-6

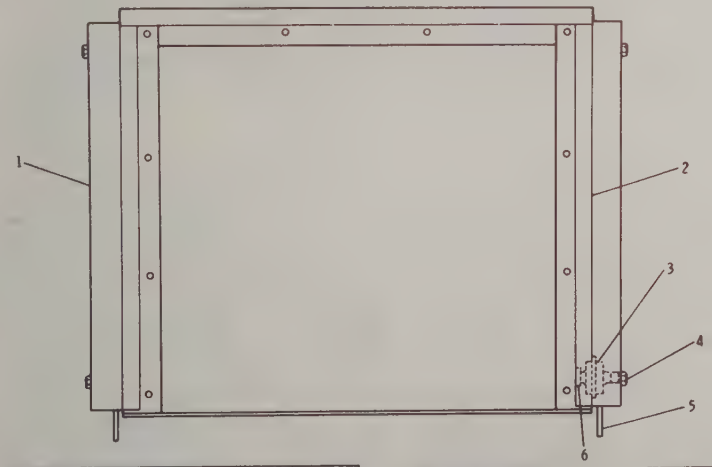


REF. NO.	PART NUMBER	DESCRIPTION	QTY
1	3N4574	PLATE	2
2	3N4572	BOX ASSEM.	1
3	3N4914	SHOCKMOUNT	4

4	4M5282	BOLT	4
	9F3691	SPACER	4
5	3N4573	SUPPORT	2

152815

3N8268 INSTRUMENT PANEL BOX GROUP—Type 1
Serial No. 46B5064—Up
Part of 3N5996 and 3N5998 Instrument Panel Groups shown on Pages 118A-4 and 118A-5



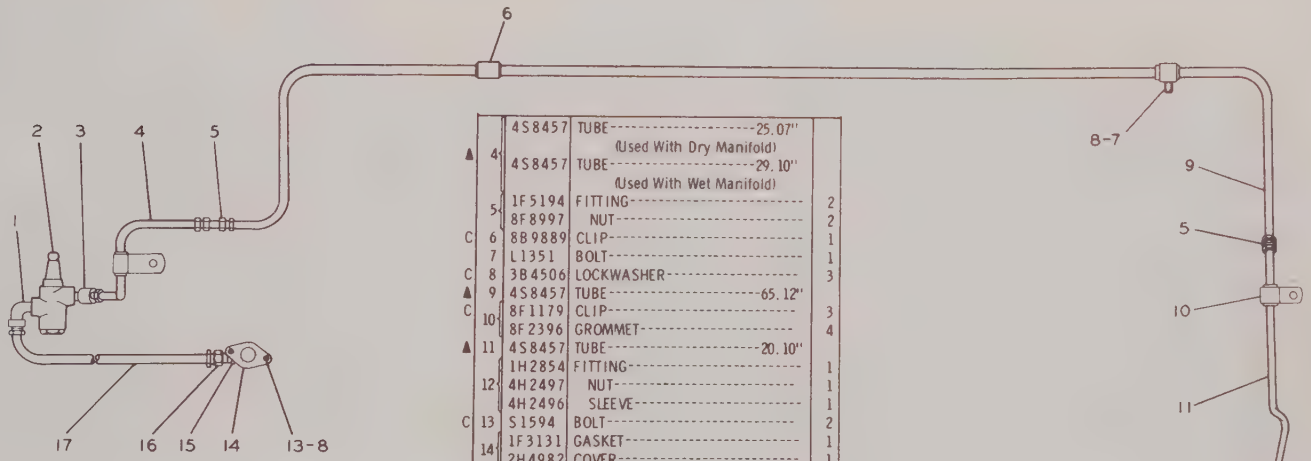
REF. NO.	PART NUMBER	DESCRIPTION	QTY
1	3N4574	PLATE	2
2	3N4572	BOX ASSEM.	1
C 3	5N6645	SHOCKMOUNT	4

4	4M5282	BOLT	4
	9F3691	SPACER	4
5	3N4573	SUPPORT	2
C 6	5N6646	SPACER	4

C INDICATES CHANGE

173488

3N8268 INSTRUMENT PANEL BOX GROUP—Type 2
Serial No. 46B5064—Up
Part of 3N5996 and 3N5998 Instrument Panel Groups shown on Pages 118A-4 and 118A-5



REF. NO.	PART NUMBER	DESCRIPTION	QTY
1	2H9866	FITTING	1
	8F8998	NUT	1
2	4L7108	VALVE	1
3	3B9004	FITTING	1
		(Used With Dry Manifold)	
	8F8997	NUT	1
	1H2854	FITTING	1
		(Used With Wet Manifold)	
	4H2497	NUT	1
	4H2496	SLEEVE	1

▲	4	4S8457 TUBE---25.07"	
		(Used With Dry Manifold)	
		4S8457 TUBE---29.10"	
		(Used With Wet Manifold)	
	5	1F5194 FITTING	2
		8F8997 NUT	2
C	6	8B9889 CLIP	1
	7	L1351 BOLT	1
C	8	3B4506 LOCKWASHER	3
▲	9	4S8457 TUBE---65.12"	
C	10	8F1179 CLIP	3
		8F2396 GROMMET	4
▲	11	4S8457 TUBE---20.10"	
	12	1H2854 FITTING	1
		4H2497 NUT	1
		4H2496 SLEEVE	1
C	13	S1594 BOLT	2
	14	1F3131 GASKET	1
		2H4982 COVER	1
	15	4B6067 ELBOW	1
	16	3B8997 FITTING	1
		8F8998 NUT	1
	17	4S8458 TUBE---20.67"	
▲		(Used With Dry Manifold)	
		4S8458 TUBE---17.77"	
		(Used With Wet Manifold)	

C INDICATES CHANGE

▲ ORDER BY THE FOOT

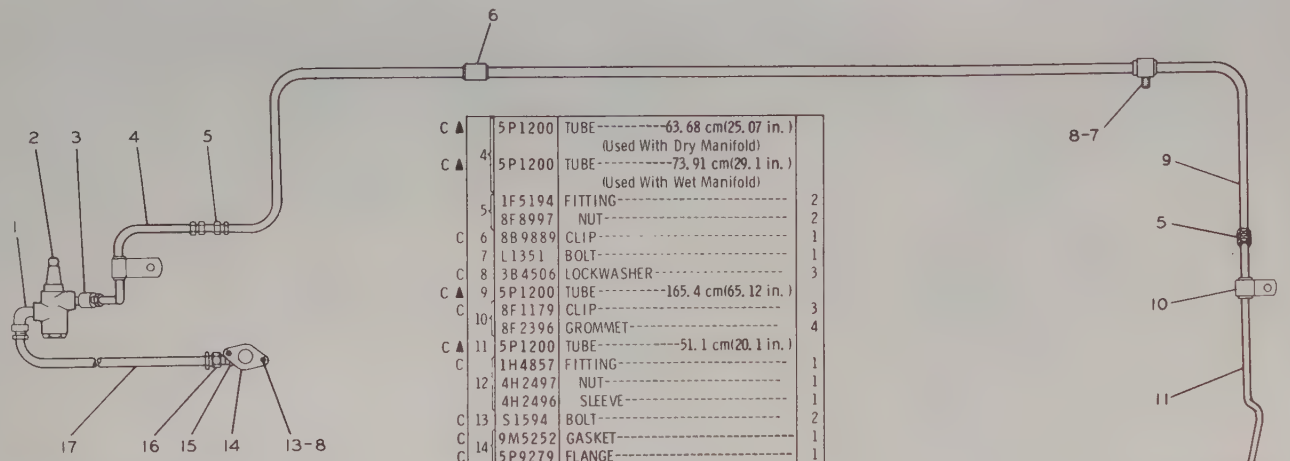
139232

5L4053 WATER TEMPERATURE SHUT-OFF GROUP—Type 2

Part of 5L4052, 3N5853 and 5N1962 Oil Pressure, Water Temperature and Overspeed Shut-Off Arrangements shown on Pages 119, 119B and 119B-2

5L4053 WATER TEMPERATURE SHUT-OFF GROUP—Type 3

Part of 5L4052, 3N5853 and 5N1962 Oil Pressure, Water Temperature and Overspeed Shut-Off Arrangements shown on Pages 119, 119B and 119B-2



REF NO	PART NUMBER	DESCRIPTION	QTY
1	2H9866	FITTING	1
	8F8998	NUT	1
2	4L7108	VALVE	1
	3B9004	FITTING	1
		(Used With Dry Manifold)	
	8F8997	NUT	1
3	1H2854	FITTING	1
		(Used With Wet Manifold)	
	4H2497	NUT	1
	4H2496	SLEEVE	1

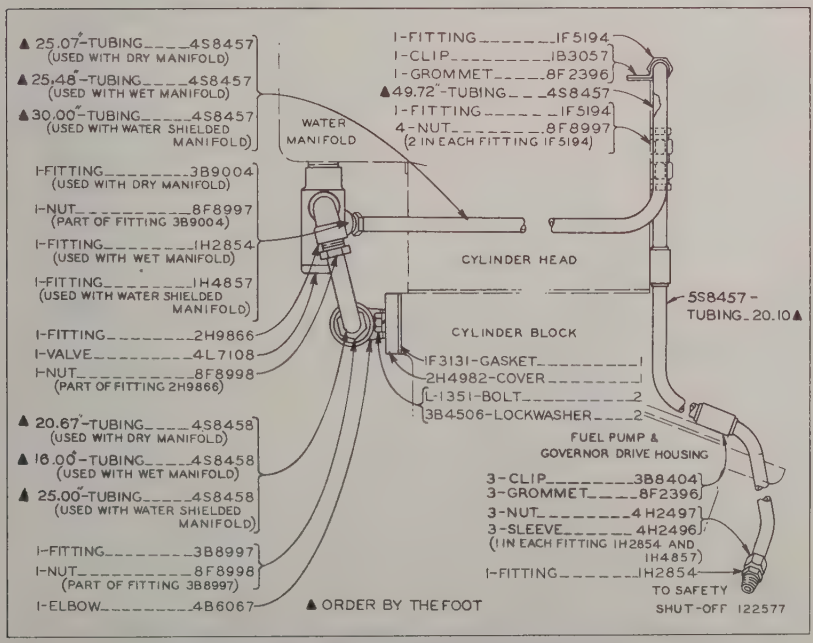
	REF NO	PART NUMBER	DESCRIPTION	QTY
C ▲	4	5P1200	TUBE----------63.68 cm(25.07 in.)	
			(Used With Dry Manifold)	
C ▲		5P1200	TUBE----------73.91 cm(29.1 in.)	
			(Used With Wet Manifold)	
	5	1F5194	FITTING	2
		8F8997	NUT	2
C	6	8B9889	CLIP	1
	7	L1351	BOLT	1
C	8	3B4506	LOCKWASHER	3
C ▲	9	5P1200	TUBE----------165.4 cm(65.12 in.)	
C	10	8F1179	CLIP	3
		8F2396	GROMMET	4
C ▲	11	5P1200	TUBE----------51.1 cm(20.1 in.)	
C	12	1H4857	FITTING	1
		4H2497	NUT	1
		4H2496	SLEEVE	1
C	13	S1594	BOLT	2
C	14	9M5252	GASKET	1
C		5P9279	FLANGE	1
	15	4B6067	ELBOW	1
	16	3B8997	FITTING	1
		8F8998	NUT	1
C ▲	17	5P1201	TUBE----------52.5 cm(20.7 in.)	
			(Used With Dry Manifold)	
C ▲		5P1201	TUBE----------45.1 cm(17.77 in.)	
			(Used With Wet Manifold)	

C INDICATES CHANGE
▲ ORDER BY THE CENTIMETRE

168912

CONSISTS OF:			PAGE
1	5L4053	WATER TEMPERATURE SHUT-OFF GROUP	118B
1	5L7252	OIL PRESSURE AND OVERSPEED SHUT-OFF GROUP	121

5L4052 OIL PRESSURE, WATER TEMPERATURE AND OVERSPEED SHUT-OFF ARRANGEMENT
Serial No. 46B1558 to 46B5064 inclusive



5L4053 WATER TEMPERATURE SHUT-OFF GROUP—Type 1
Part of 5L4052, 3N5853 and 5N1962 Oil Pressure, Water Temperature and Overspeed Shut-Off Arrangements listed on Pages 119, 119B and 119B-2

		Consists of:	Page
1	5L4053	Water Temperature Shut-Off Group	119
1	5N2927	Safety Mechanical Shut-Off Group	121C-1

5N2941 OIL PRESSURE, WATER TEMPERATURE AND OVERSPEED SHUT-OFF ARRANGEMENT
Serial No. 46B5065—Up. FOR USE WITH PRESSURIZED COOLING SYSTEM

Consists of:

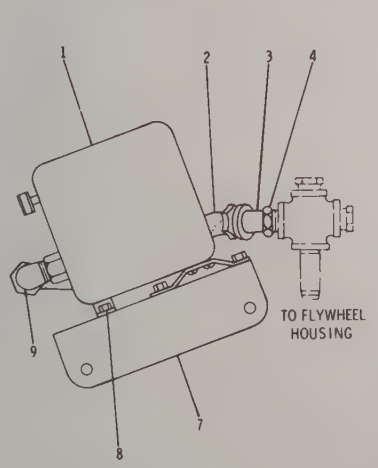
21	2L8075	Terminal--No. 8 Screw
4	2L9724	Clip
2	2L8081	Terminal--1.27cm (.50 in.) Screw
*	5P5629	Wire--12.19m (480 in.)
50	8L8413	Tie
4	2L8074	Terminal--No. 6 Screw
6	2L8065	Terminal--No. 8 Screw
2	2L8079	Terminal--.95cm (.375 in.) Screw
2	8S4626	Splice--Wire
1	3N5681	Tie--Cable (Clip of 50)

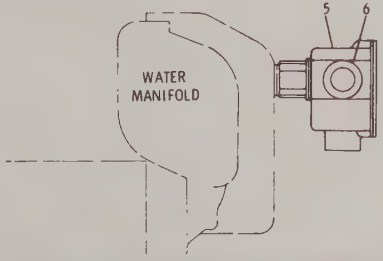
* Order by the metre

4L1192 OIL PRESSURE, WATER TEMPERATURE WIRING GROUP
OVERSPEED FLYBALL

CONSISTS OF:			PAGE
1	5L4053	WATER TEMPERATURE SHUT-OFF GROUP	119
1	3N5532	SAFETY MECHANICAL SHUT-OFF GROUP	121C

3N5853 OIL PRESSURE, WATER TEMPERATURE AND OVERSPEED SHUT-OFF ARRANGEMENT—Replaced by 5N2941 and 5N1962 listed on Pages 119A and 119B Serial No. 46B5065—Up. FOR USE WITH HYDRA-MECHANICAL GOVERNOR





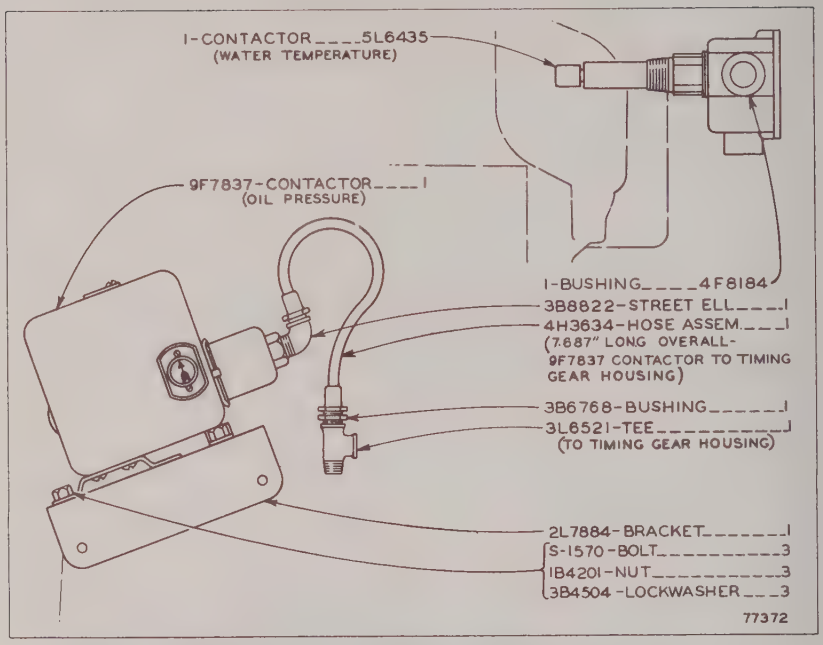
	REF NO	PART NUMBER	DESCRIPTION	QTY
C	1	2N6955	SWITCH---------(oil pressure)----	1
C	2	3N4579	HOSE ASSEM. --35.56 cm(14 in.)	1
C	3	8L5008	ELBOW----------	1
C	4	3B6768	FITTING----------	1
	5	5L6435	CONTACTOR--(water temperature)--	1
	6	4F8184	BUSHING----------	1
	7	2L7884	BRACKET----------	1
	8	S1570	BOLT----------	3
		1B4201	NUT----------	3
		3B4504	LOCKWASHER----------	3
C	9	2N1287	ELBOW----------	1

C INDICATES CHANGE 214169

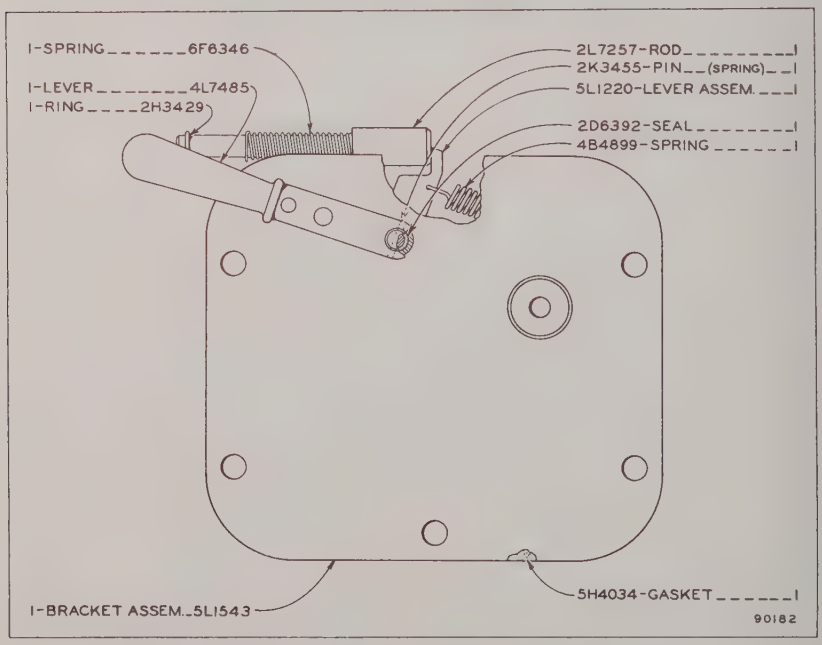
5L5859 SAFETY ALARM CONTACTOR GROUP—Type 2

		Consists of:	Page
1	5L4053	Water Temperature Shut-Off Group	119
1	5N3676	Mechanical Shut-Off Group	121C-3

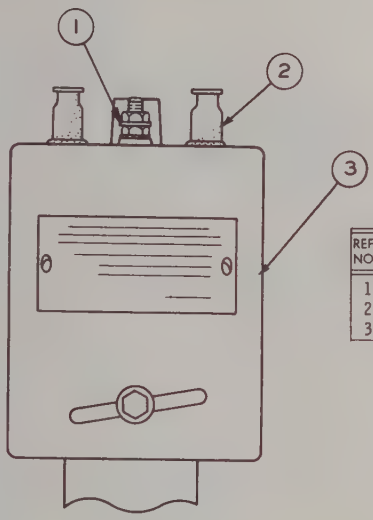
5N1962 OIL PRESSURE, WATER TEMPERATURE AND OVERSPEED SHUT-OFF ARRANGEMENT—1200 RPM—Replaces 3N5853
Serial No. 46B5065—Up
FOR USE WITH PRESSURIZED COOLING SYSTEM



5L5859 SAFETY ALARM CONTACTOR GROUP



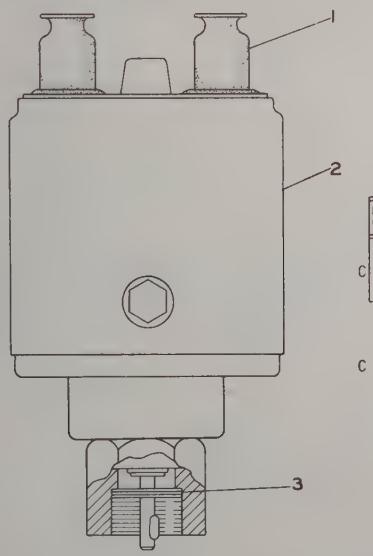
5L1502 MANUAL SHUT-OFF GROUP
Part of 5L7252 Oil Pressure and Overspeed Shut-Off Group
shown on Pages 120C, 120D & 121



REF. NO.	PART NUMBER	DESCRIPTION	QTY.
1	5M1822	WASHER	3
2	7L7516	BOOT	2
3	7L7349	CONTACTOR-----(Overspeed)------	1

104950

7L7366 OVERSPEED SAFETY CONTACTOR GROUP
Serial No. 46B1558—Up
Only separate parts serviced. When complete Group is required order 3N6384 shown on Page 120B

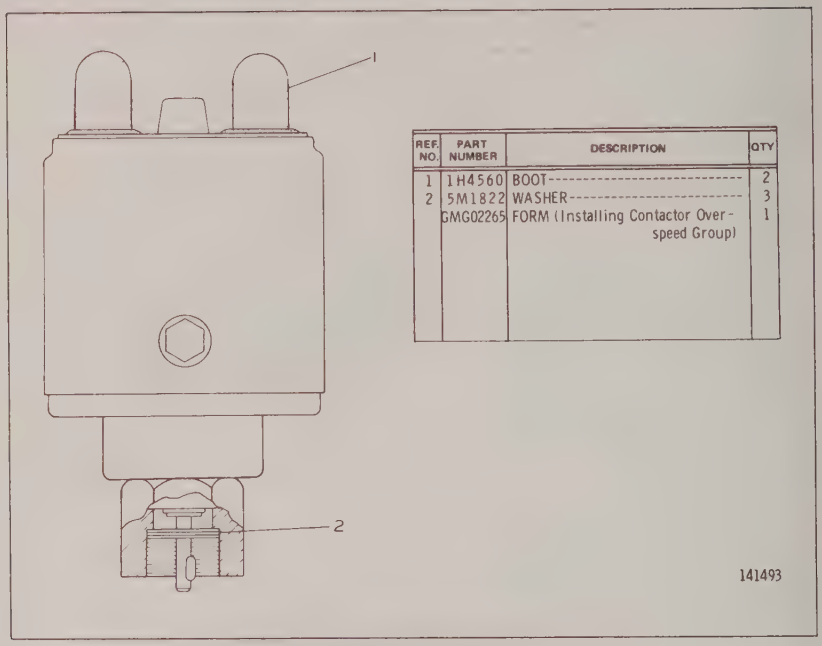


	REF. NO.	PART NUMBER	DESCRIPTION	QTY
	1	7L7516	BOOT	2
C	2	3N4028	CONTACTOR	1
	3	5M1822	WASHER	3

C INDICATES CHANGE

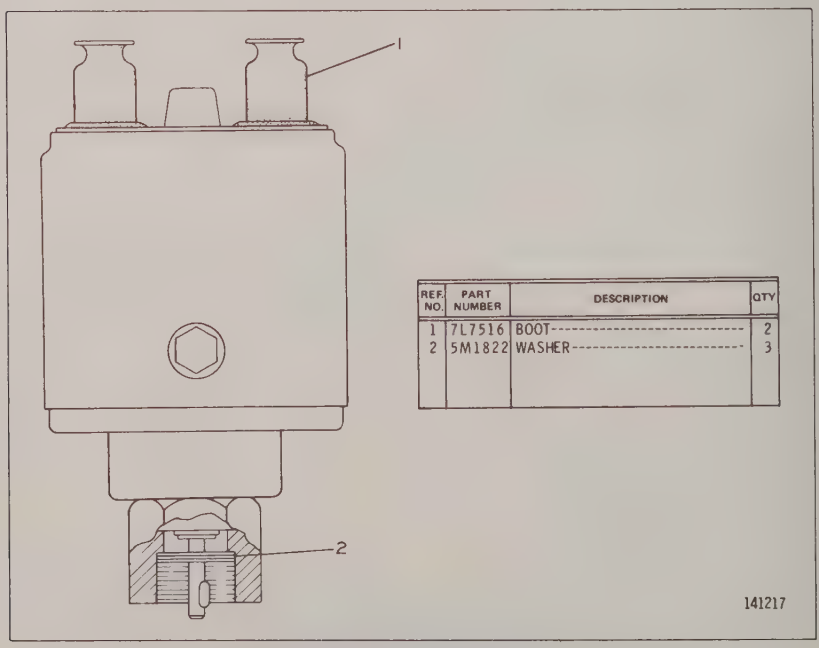
115380

2N4673 OVERSPEED CONTACTOR GROUP
Serial No. 46B1558—Up
Only separate parts serviced. When complete Group is required order 3N6384 shown on Page 120B



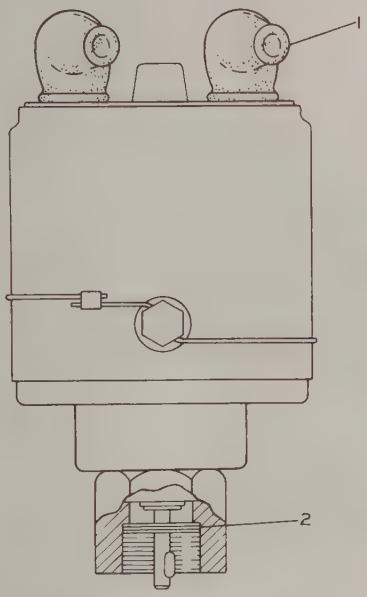
REF. NO.	PART NUMBER	DESCRIPTION	QTY
1	1H4560	BOOT	2
2	5M1822	WASHER	3
	GMG02265	FORM (Installing Contactor Overspeed Group)	1

3N6384 OVERSPEED CONTACTOR GROUP



REF. NO.	PART NUMBER	DESCRIPTION	QTY
1	7L7516	BOOT	2
2	5M1822	WASHER	3

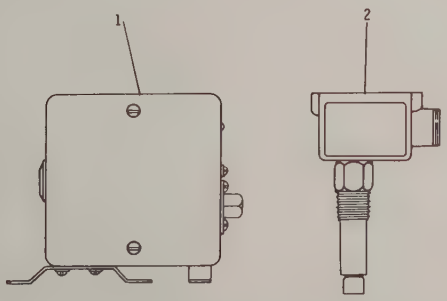
3N4948 OVERSPEED CONTACTOR GROUP
Serial No. 46B1558 to 46B5064 inclusive. Only separate parts serviced. When complete Group is required order 3N6383 shown on Page 120B-1



REF. NO.	PART NUMBER	DESCRIPTION	QTY
1	1H4560	BOOT	2
2	5M1822	WASHER	3

143928

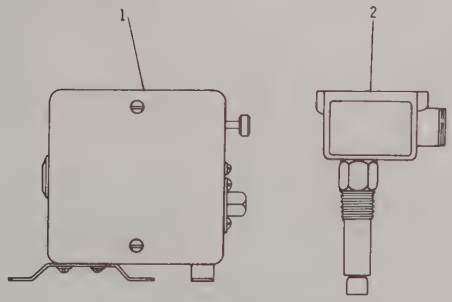
3N6383 OVERSPEED CONTACTOR GROUP
Serial No. 46B1558 to 46B5064 inclusive



REF. NO.	PART NUMBER	DESCRIPTION	QTY
1	2N7124	SWITCH------(oil pressure)-------	1
2	5L6435	CONTACTOR--(water temperature)--	1

119370

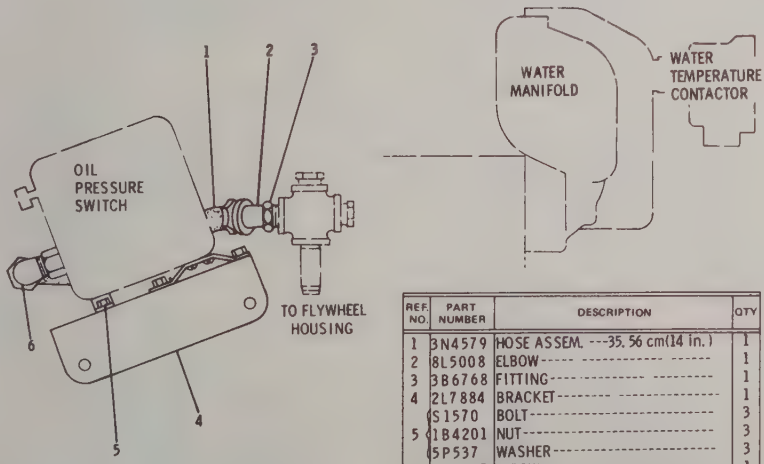
3N5626 CONTACTOR GROUP—Oil Pressure and Water Temperature
Serial No. 46B2437—Up. FOR USE WITH ELECTRIC WOODWARD GOVERNOR
REFER TO AUTOMATIC START STOP CHART SHOWN ON PAGE 128B-2
FOR USAGE



REF. NO.	PART NUMBER	DESCRIPTION	QTY
1	2N6955	SWITCH---------(pressure)-------	1
2	5L6435	CONTACTOR--(water temperature)--	1

119084

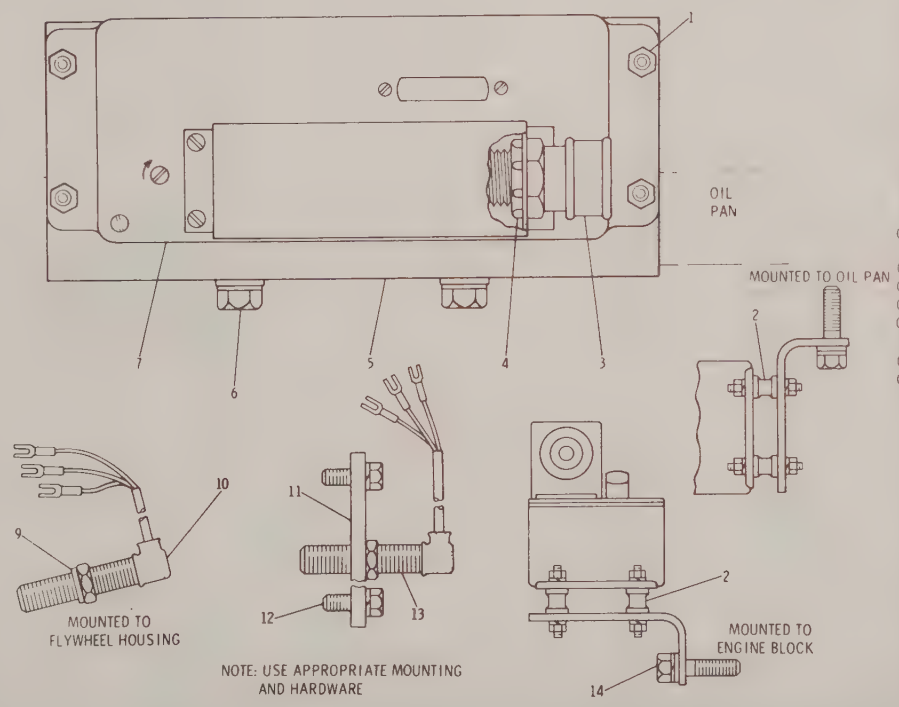
3N6867 CONTACTOR GROUP—Oil Pressure, Water Temperature and Electronic Overspeed
Note: 2L3402 Oil Pressure & Water Temperature Switch Assembly is Available



REF. NO.	PART NUMBER	DESCRIPTION	QTY
1	3N4579	HOSE ASSEM. ---35.56 cm(14 in.)	1
2	8L5008	ELBOW----- ---------- ------	1
3	3B6768	FITTING---------- ---------	1
4	2L7884	BRACKET-------- ----------	1
	1S1570	BOLT----------	3
5	1B4201	NUT----------	3
	5P537	WASHER----------	3
6	2N1287	ELBOW----------	1

214165

5N3954 CONTACTOR MOUNTING GROUP—Oil Pressure, Water Temperature & Electronic Overspeed

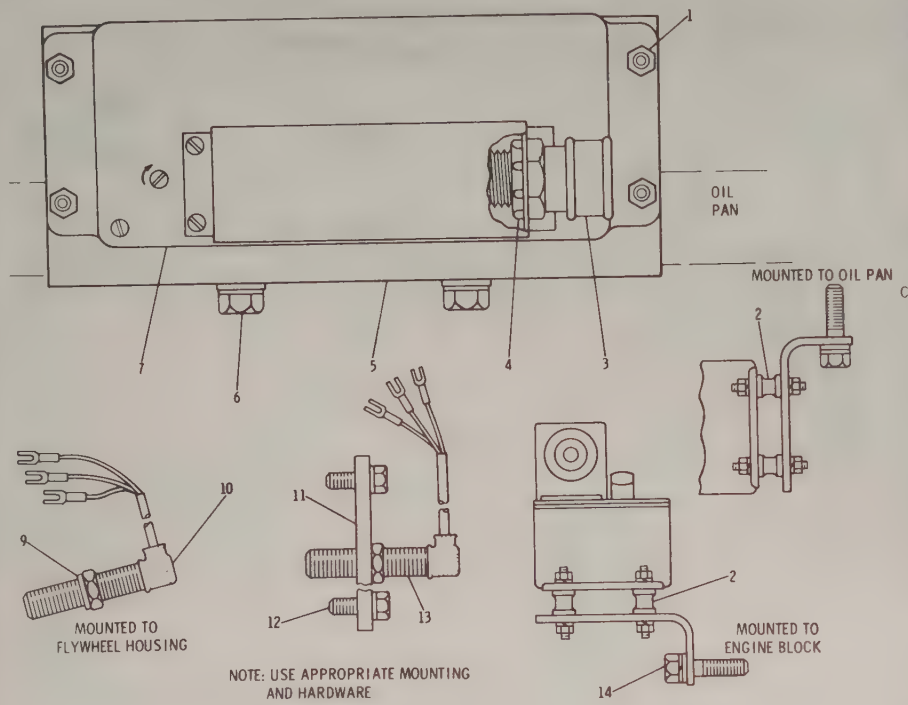


REF NO	PART NUMBER	DESCRIPTION	QTY
1	4B2043	NUT	8
	3B4501	LOCKWASHER	8
2	3N7588	MOUNT	4
3	8D7957	CONNECTOR	1
C 4	3F2065	LOCKNUT	1
5	3N7689	PLATE	1
6	2P3204	BOLT (washer head)	2
	4B4278	WASHER	2
7	3N6878	SWITCH (speed) (Includes)	1
C	6L7159	SCREW	4
9	4B4281	WASHER	1
C 10	6L3483	COVER	1
C 11	3N8388	PLATE	1
C 12	S1594	BOLT	4
C	3B4506	LOCKWASHER	4
13	3N7477	PICK UP ASSEM. (magnetic)	1
C 14	S1585	BOLT	2
C	3B4508	LOCKWASHER	2
	SMHS6819	FORM (Instructions for Installing Speed Switch)	1
	3N5606	WIRING DIAGRAM	1

C INDICATES CHANGE 159593

3N7478 OVERSPEED CONTACTOR GROUP—Type 1
Serial No. 46B5065—Up

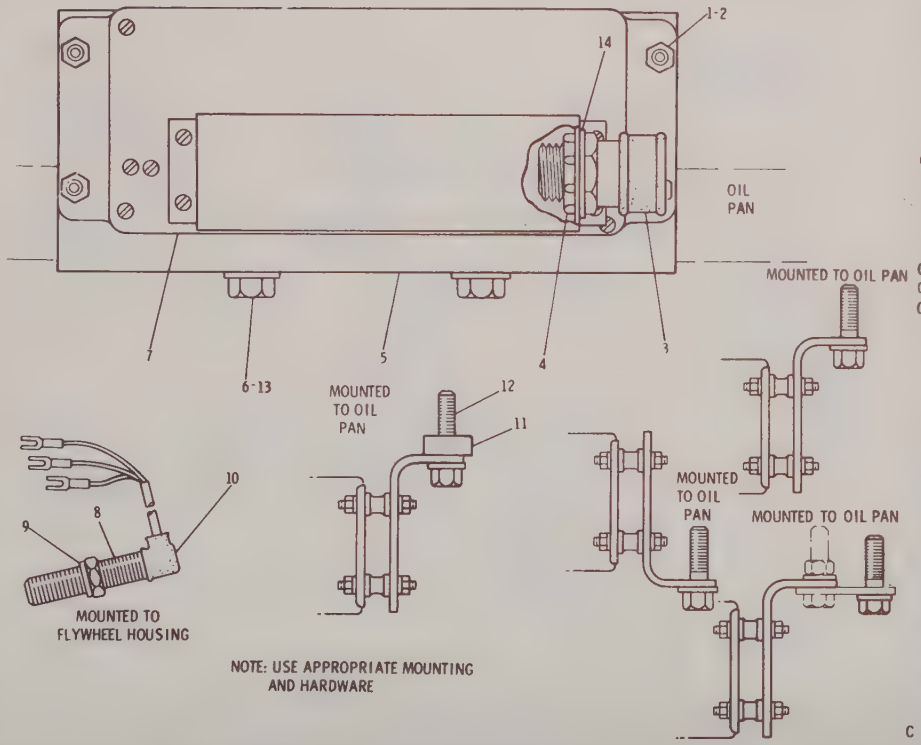
3N7478 OVERSPEED CONTACTOR GROUP—Type 2
Serial No. 46B5065—Up



REF. NO	PART NUMBER	DESCRIPTION	QTY
1	4B2043	NUT	8
	3B4501	LOCKWASHER	8
2	3N7588	MOUNT	4
3	8D7957	CONNECTOR	1
4	3F2065	LOCKNUT	1
5	3N7689	PLATE	1
6	2P3204	BOLT--------(washer head)-------	2
	4B4278	WASHER	2
7	3N6878	SWITCH--------(speed)---------	1
9	4B4281	WASHER	1
10	6L3483	COVER	1
11	3N8388	PLATE	1
12	S1594	BOLT	4
	5M2894	WASHER	4
13	3N7477	PICK-UP ASSEM. ---(magnetic)---	1
	SMHS6819	FORM (Instructions for Installing Speed Switch)	1
	3N5606	WIRING DIAGRAM	1

C INDICATES CHANGE

211438



NOTE: USE APPROPRIATE MOUNTING AND HARDWARE

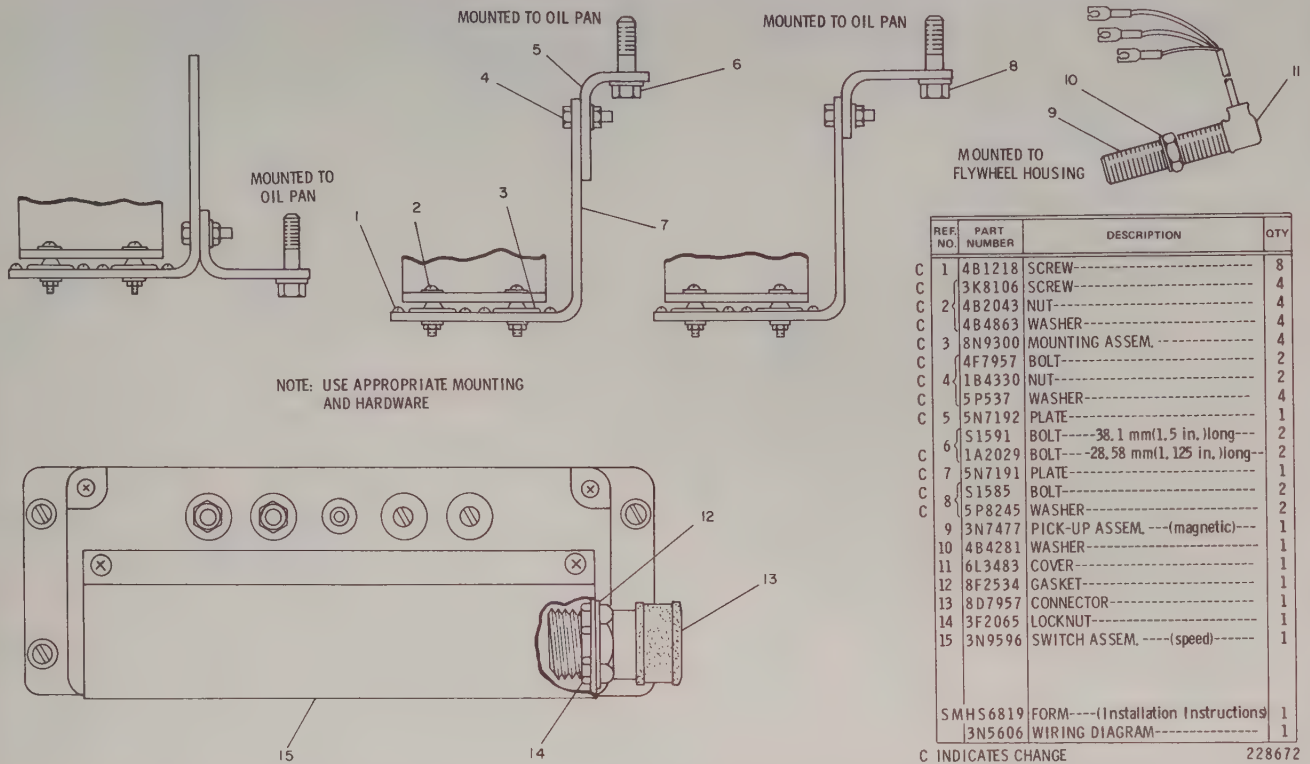
REF NO	PART NUMBER	DESCRIPTION	QTY
C 1	4B2043	NUT	8
C 1	4B4863	WASHER	8
2	3N7588	MOUNT	4
3	8D7957	CONNECTOR	1
4	3F2065	LOCKNUT	1
5	3N7689	PLATE	1
C 6	S1591	BOLT--(washer head)	2
7	3N9596	SWITCH--(speed)	1
8	3N7477	PICK-UP ASSEM.--(magnetic)	1
9	4B4281	WASHER	1
10	6L3483	COVER	1
11	5B546	SPACER	2
C 12	S1587	BOLT	2
C 13	5M2894	WASHER	2
C 14	8F2534	GASKET	1
	SMHS6819	FORM (Installing Overspeed Contact Group)	1
	3N5606	WIRING DIAGRAM	1

C INDICATES CHANGE

222269

3N9595 CONTACTOR GROUP—Oil Pressure, Water Temperature & Electronic Overspeed

3N9595 CONTACTOR GROUP—Oil Pressure, Water Temperature & Electronic Overspeed—Type 2

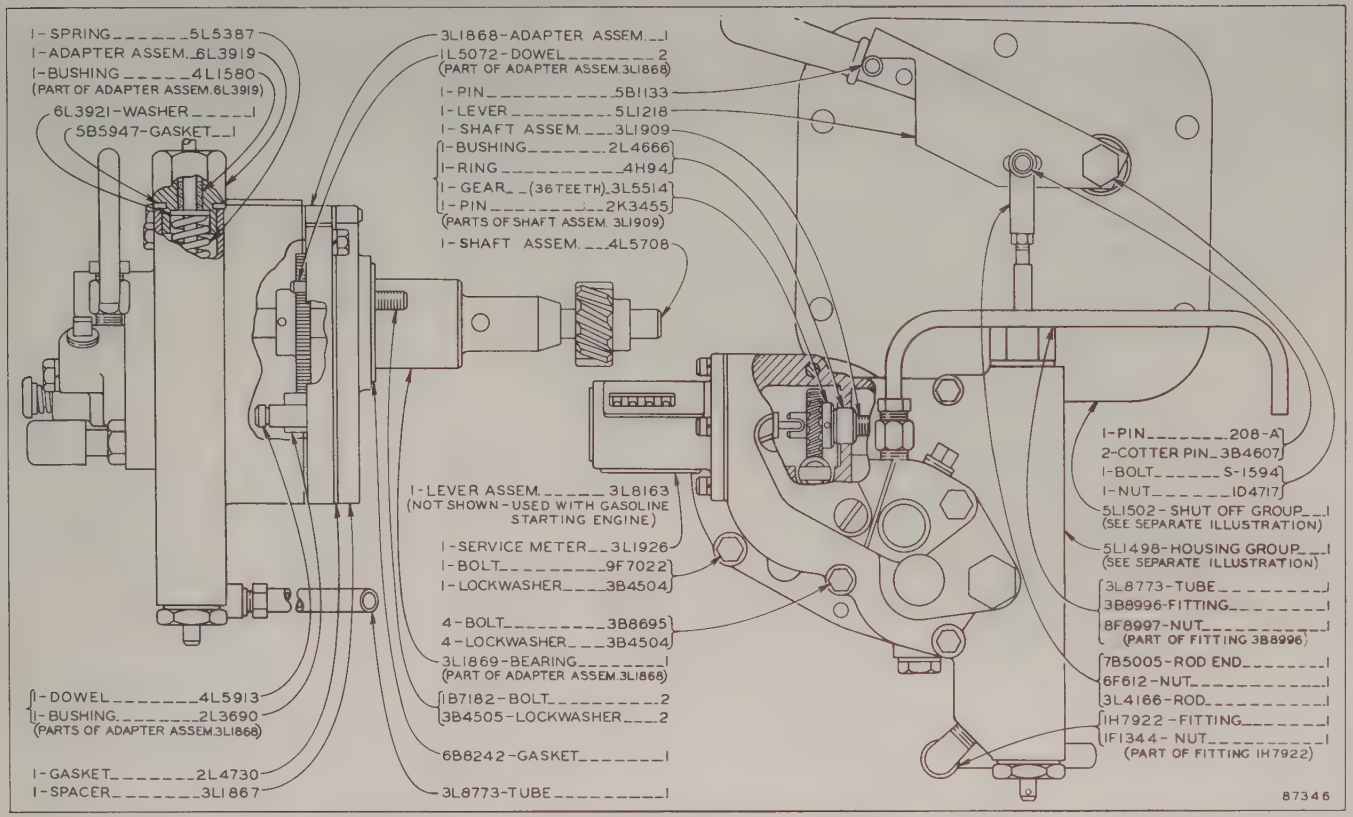


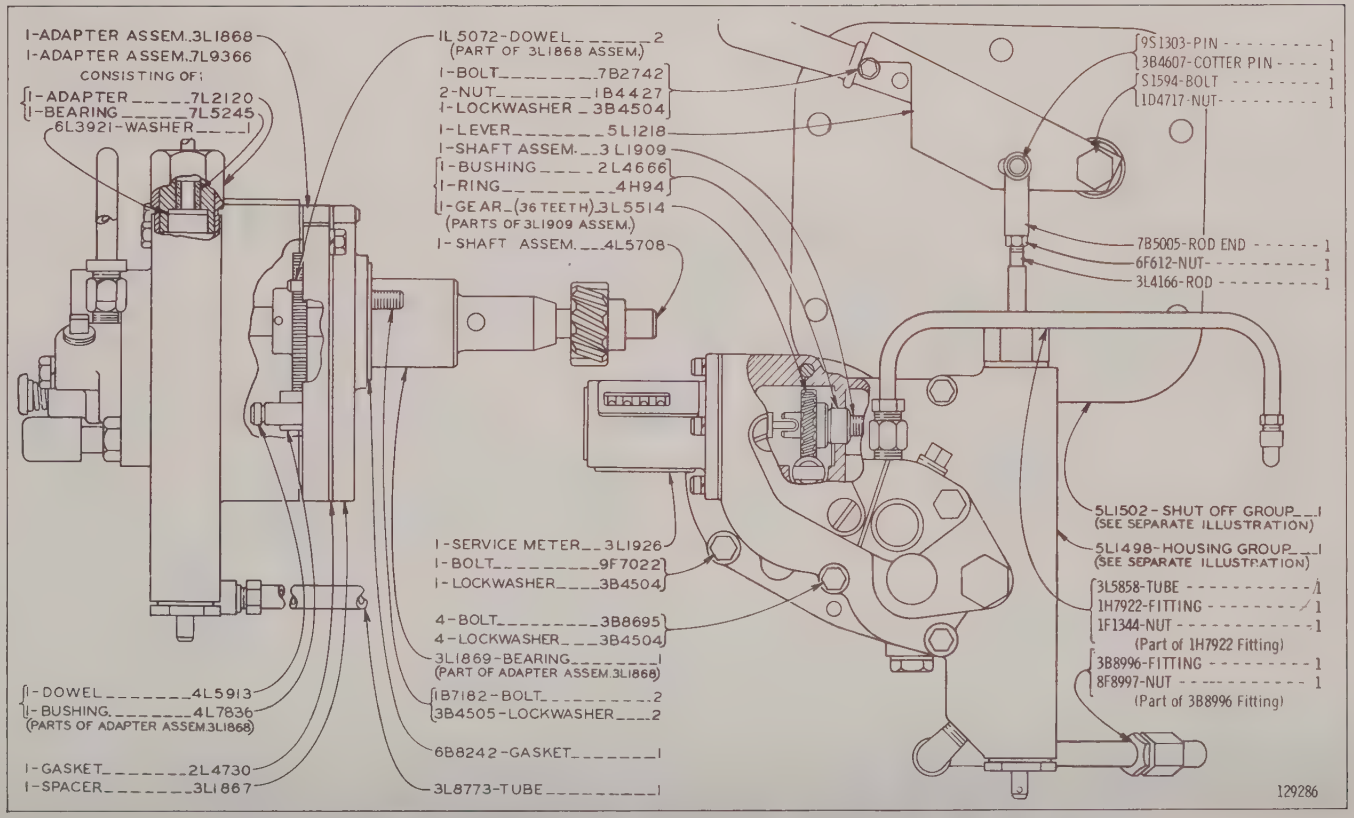
	REF. NO.	PART NUMBER	DESCRIPTION	QTY
C	1	4B1218	SCREW	8
C	2	3K8106	SCREW	4
C		4B2043	NUT	4
C		4B4863	WASHER	4
C	3	8N9300	MOUNTING ASSEM.	4
C	4	4F7957	BOLT	2
C		1B4330	NUT	2
C		5P537	WASHER	4
C	5	5N7192	PLATE	1
	6	S1591	BOLT---38.1 mm(1.5 in.)long	2
C		1A2029	BOLT---28.58 mm(1.125 in.)long	2
C	7	5N7191	PLATE	1
C	8	S1585	BOLT	2
C		5P8245	WASHER	2
	9	3N7477	PICK-UP ASSEM.---(magnetic)	1
	10	4B4281	WASHER	1
	11	6L3483	COVER	1
	12	8F2534	GASKET	1
	13	8D7957	CONNECTOR	1
	14	3F2065	LOCKNUT	1
	15	3N9596	SWITCH ASSEM.---(speed)	1
		SMHS6819	FORM---(Installation Instructions)	1
		3N5606	WIRING DIAGRAM	1

C INDICATES CHANGE

228672

5L7252 OIL PRESSURE AND OVERSPEED SHUT-OFF GROUP—Type 1
Serial No. 46B1558 to 46B5064 inclusive. Also part of 5L4052 Arrangement listed on Page 119
5L1502 Shut-Off and 5L1498 Housing parts are shown on Pages 120, 122, 122A, 122B and 123

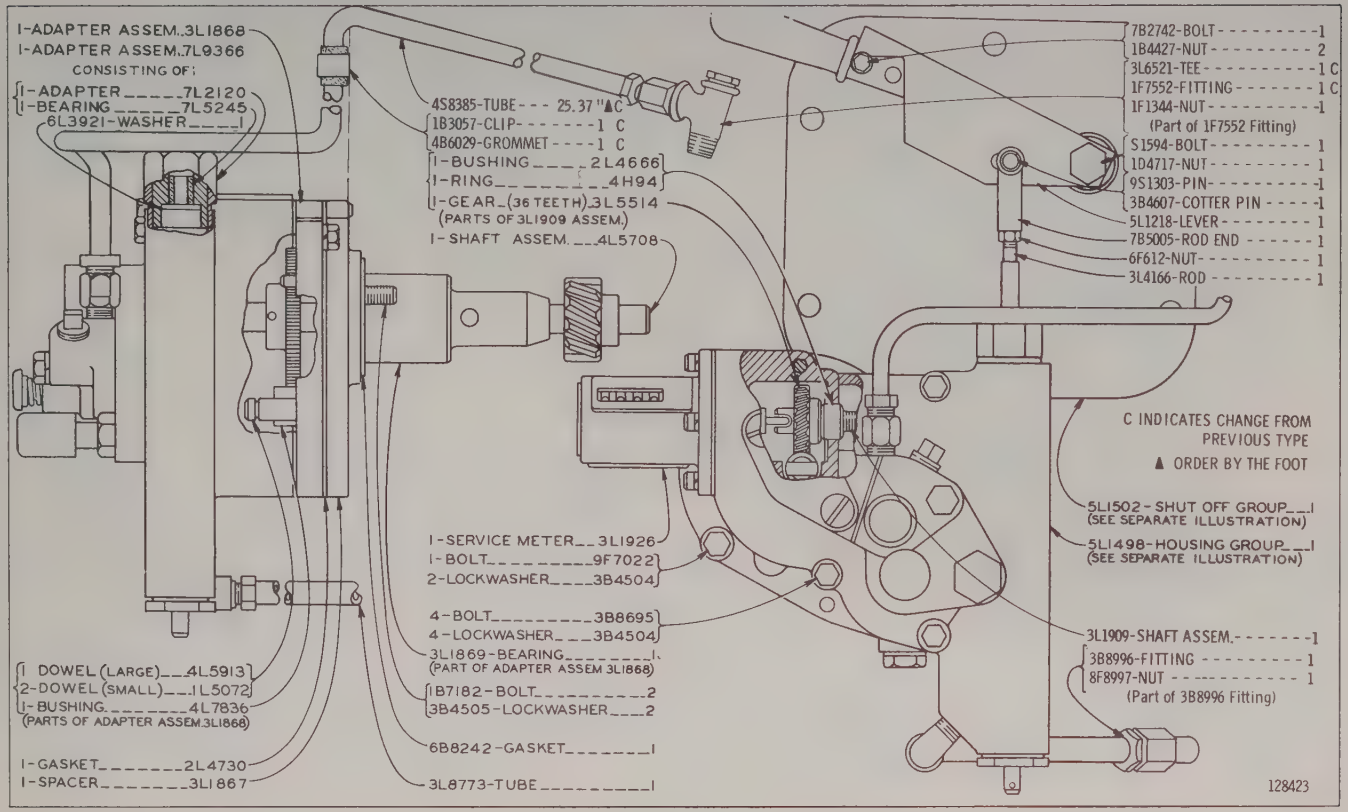


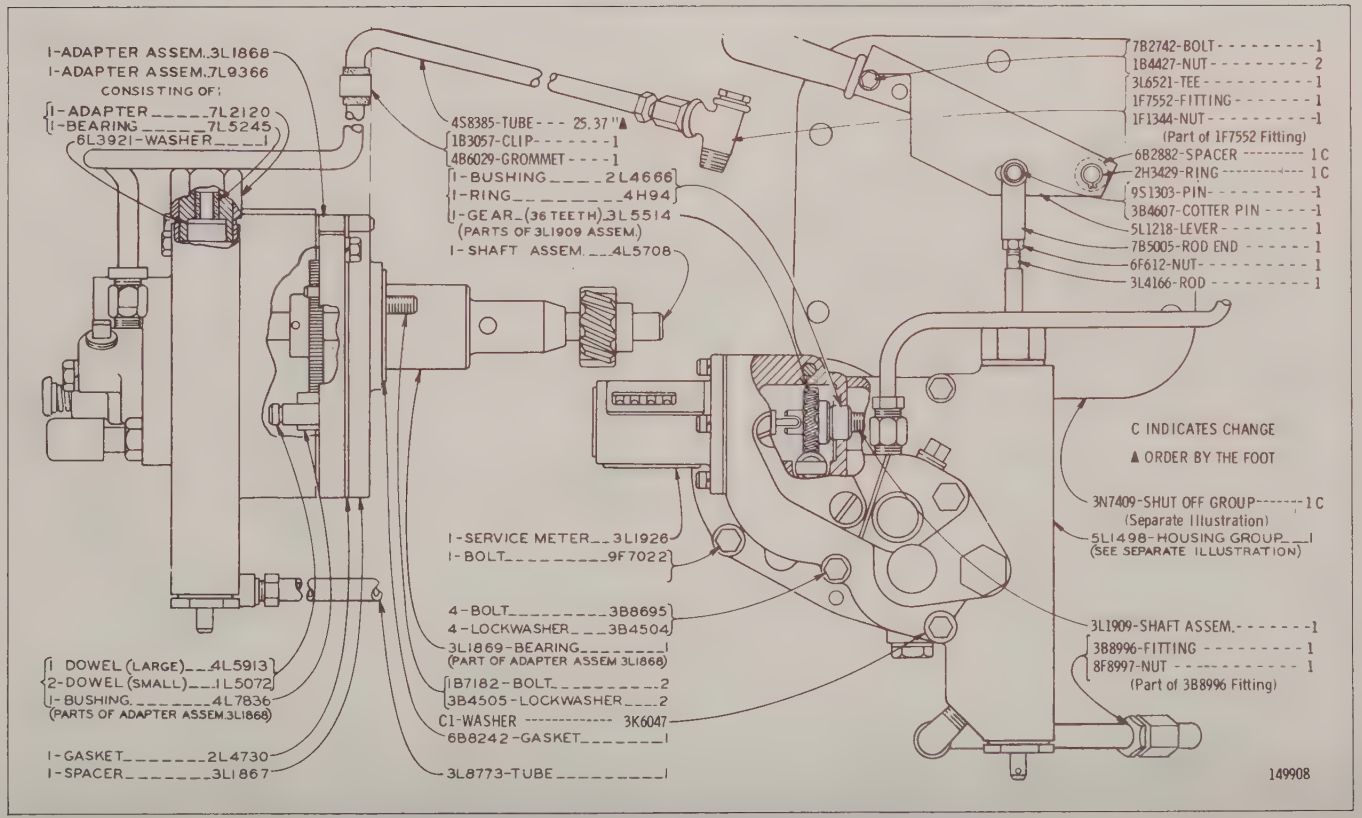


5L7252 OIL PRESSURE AND OVERSPEED SHUT-OFF GROUP—Type 2
Serial No. 46B1558 to 46B5064 inclusive. Also part of 5L4052 Arrangement listed on Page 119. 5L1502 Shut-Off and 5L1498 Housing parts are shown on Pages 120, 122, 122A, 122B and 123

5L7252 OIL PRESSURE AND OVERSPEED SHUT-OFF GROUP—Type 3

Serial No. 46B1558 to 46B5064 inclusive. Also part of 5L4052 Arrangement listed on Page 119
5L1502 Shut-Off and 5L1498 Housing parts are shown on Pages 120, 122, 122A, 122B and 123

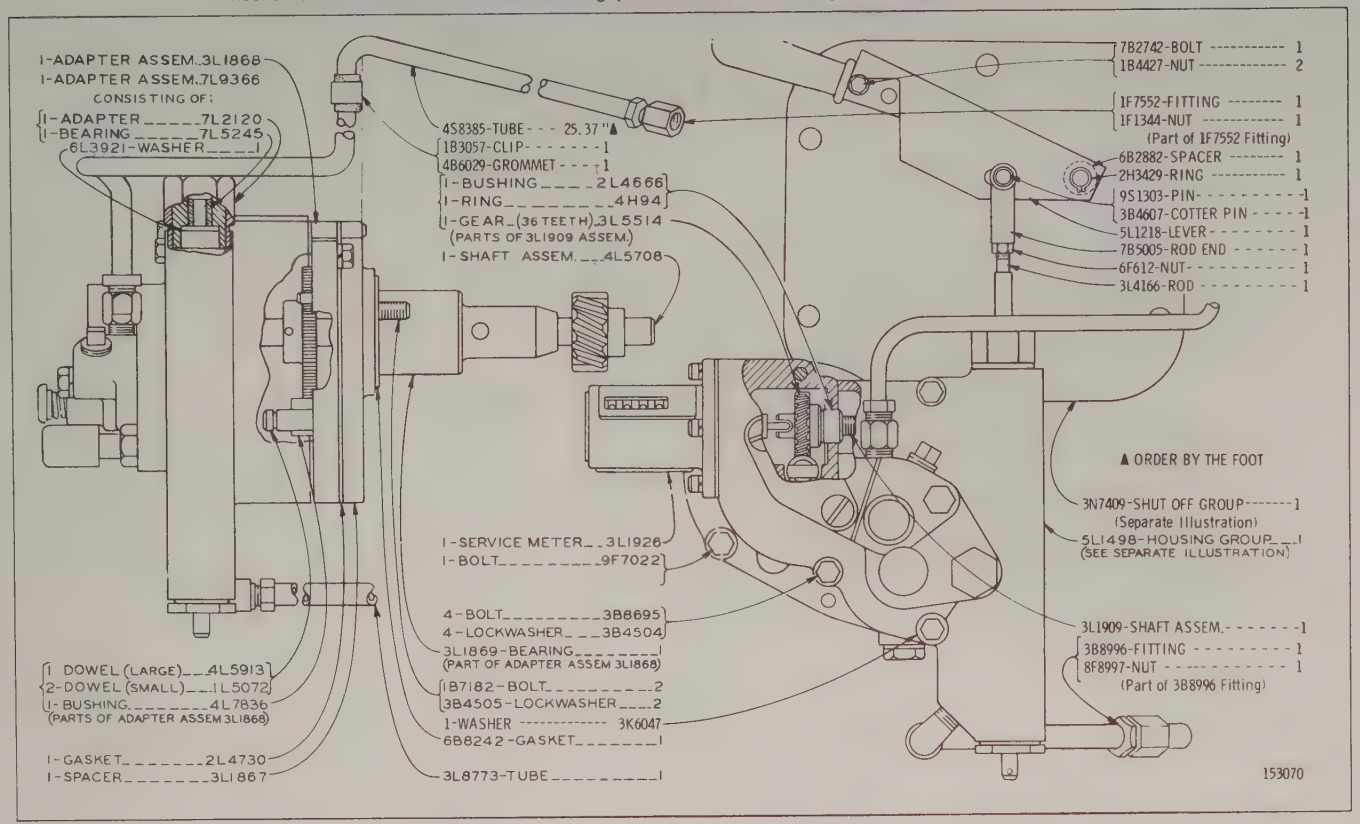


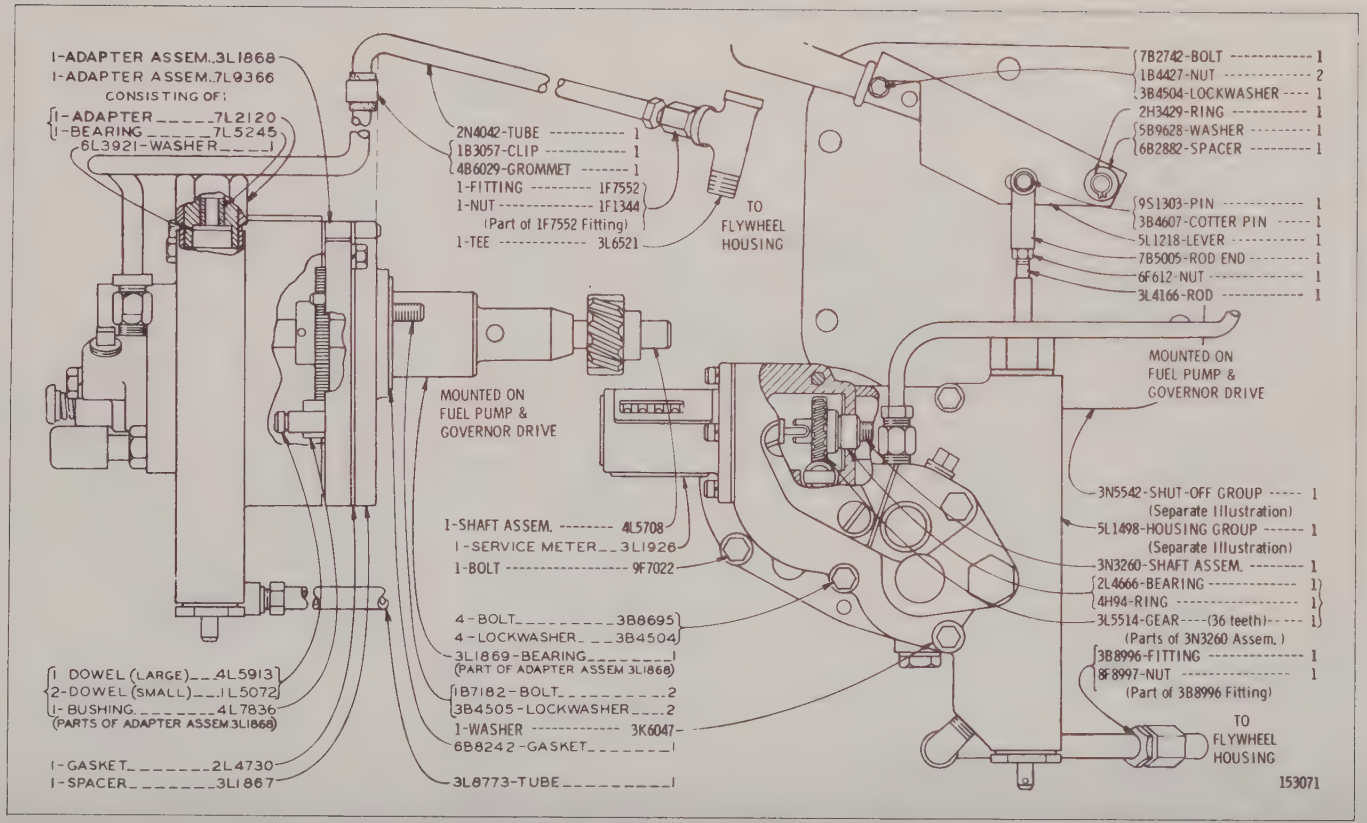


5L7252 OIL PRESSURE AND OVERSPEED SHUT-OFF GROUP—Type 4
Serial No. 46B1558 to 46B5064 inclusive. Also part of 5L4052 Arrangement listed on Page 119
3N7409 Mechanical Shut-Off and 5L1498 Housing parts are shown on Pages 120B-2 and 122 through 123

5L7252 OIL PRESSURE AND OVERSPEED SHUT-OFF GROUP—Type 5

Serial No. 46B1558 to 46B5064 inclusive. Also part of 5L4052 Arrangement listed on Page 119. 3N7409 Mechanical Shut-Off and 5L1498 Housing parts are shown on **Pages 121D and 122 through 123**





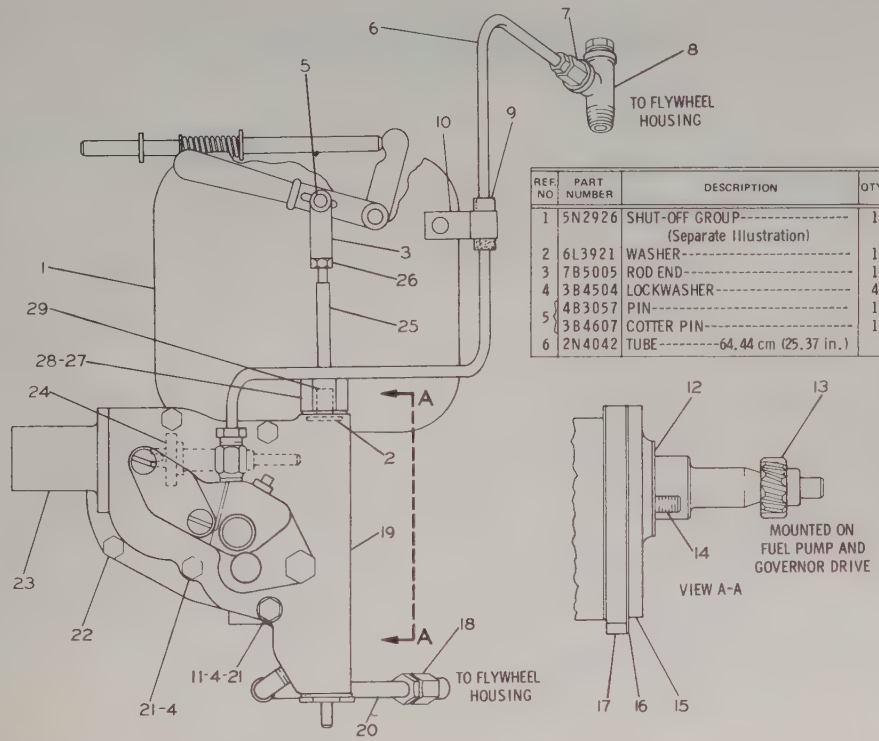
3N5532 SAFETY MECHANICAL OVERSPEED AND OIL PRESSURE SHUT-OFF GROUP
Replaced by 5N2927 shown on Pages 121C-1 & 121C-2
Serial No. 46B5065—Up. Also part of 3N5853 Arrangement listed on Page 119B. 3N5542 Mechanical Shut-Off and 5L1498 Housing parts are shown on Pages 121D and 122 through 123

5N2927 SAFETY MECHANICAL SHUT-OFF GROUP—Type 1

Serial No. 46B5065—Up

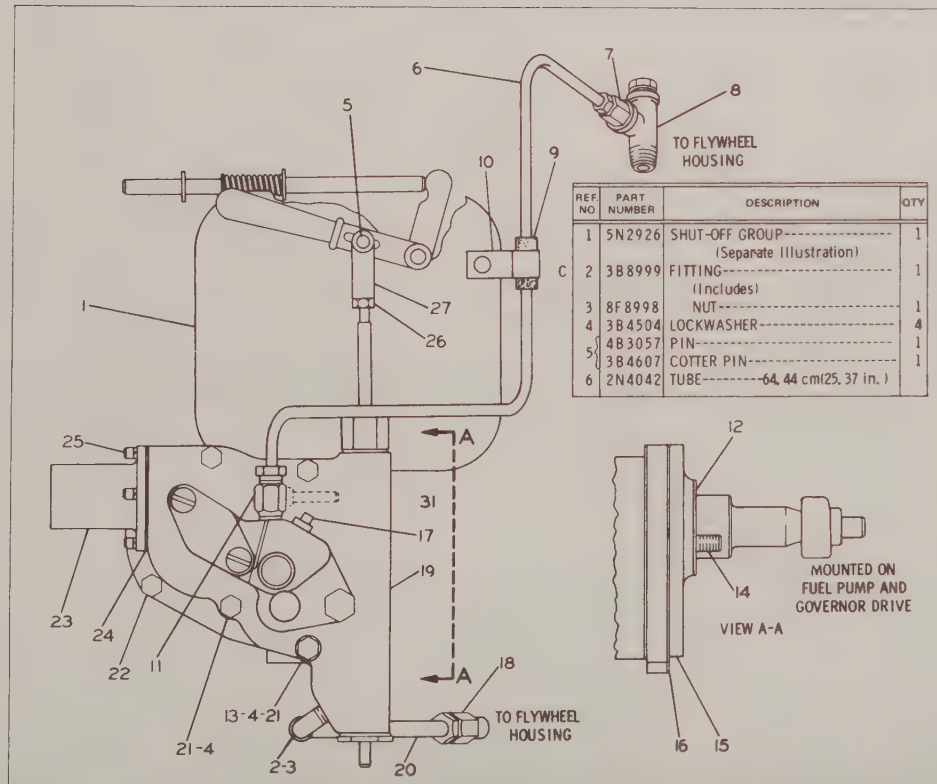
Also part of 5N2941 Shut-Off Arrangement listed on Page 119A

5N2926 Shut-Off & 5L1498 Housing parts are shown on Pages 121C-6 & 122 through 123B



REF. NO.	PART NUMBER	DESCRIPTION	QTY.
1	5N2926	SHUT-OFF GROUP (Separate Illustration)	1
2	6L3921	WASHER	1
3	7B5005	ROD END	1
4	3B4504	LOCKWASHER	4
5	4B3057	PIN	1
	3B4607	COTTER PIN	1
6	2N4042	TUBE—64.44 cm (25.37 in.)	
7	1F7552	FITTING (Includes)	1
	1F1344	NUT	1
8	3L6521	TEE	1
9	4B6029	GROMMET	1
10	1B3057	CLIP	1
11	3K6047	WASHER	1
12	6B8242	GASKET	1
13	4L5708	SHAFT ASSEM.	1
14	1B7182	BOLT	2
	3B4505	LOCKWASHER	2
15	3L1867	SPACER	1
16	2L4730	GASKET	1
17	3L1868	ADAPTER ASSEM.	1
18	3B8996	FITTING (Includes)	1
	8F8997	NUT	1
19	5L1498	SHUT-OFF GROUP (Separate Illustration)	1
20	3L8773	TUBE	1
21	3B8695	BOLT	4
22	9F7022	BOLT	1
23	3L1926	SERVICE METER	1
24	3N3260	SHAFT ASSEM. (Includes)	1
	3L5514	GEAR	1
	2L4666	BUSHING	1
	4H94	RING	1
25	5N2920	ROD	1
26	6F612	NUT	1
27	7L9366	ADAPTER ASSEM. (Includes)	1
28	7L2120	ADAPTER	1
29	7L5245	BEARING	1

161537



REF. NO	PART NUMBER	DESCRIPTION	QTY
1	5N2926	SHUT-OFF GROUP (Separate Illustration)	1
C 2	3B8999	FITTING (Includes)	1
3	8F8998	NUT	1
4	3B4504	LOCKWASHER	4
5	4B3057	PIN	1
	3B4607	COTTER PIN	1
6	2N4042	TUBE---64.44 cm(25.37 in.)	
	1F7552	FITTING (Includes)	1
7	1F1344	NUT	1
8	3L6521	TEE	1
9	4B6029	GROMMET	1
10	1B3057	CLIP	1
C	3B8995	FITTING (Includes)	1
11	1F1344	NUT	1
12	6B8242	GASKET	1
13	3K6047	WASHER	1
14	1B7182	BOLT	2
	3B4505	LOCKWASHER	2
15	3L1867	SPACER	1
16	2L4730	GASKET	1
C 17	2B7409	PLUG	1
	3B8996	FITTING (Includes)	1
18	8F8997	NUT	1
19	5L1498	SHUT-OFF GROUP (Separate Illustration)	1
20	3L8773	TUBE	1
21	3B8695	BOLT	4
22	9F7022	BOLT	1
23	3L1926	SERVICE METER	1
C 24	3L5767	GASKET	1
C	2H191	BOLT	4
C 25	3B4502	LOCKWASHER	4
26	6F612	NUT	1
27	7B5005	ROD END	1

C INDICATES CHANGE

161542

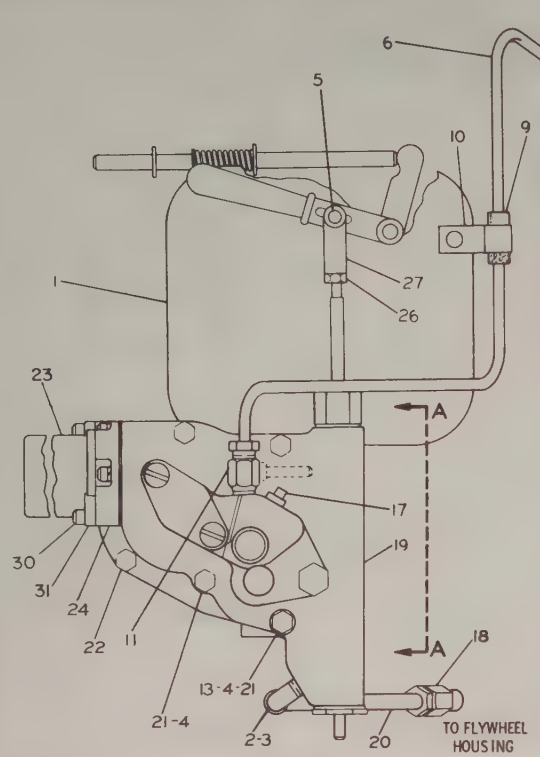
5N2927 SAFETY MECHANICAL SHUT-OFF GROUP—Type 2
Serial No. 46B5065—Up
Also part of 5N2941 Shut-Off Arrangement listed on Page 119A
5N2926 Shut-Off & 5L1498 Housing parts are shown on Pages 121C-6 & 122 through 123B

5N2927 SAFETY MECHANICAL SHUT-OFF GROUP—Type 3

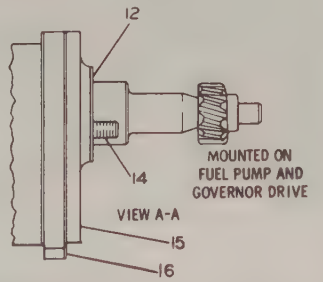
Serial No. 46B5065—Up

Also part of 5N2941 Shut-Off Arrangement listed on Page 119A

5N2926 Shut-Off and 5L1498 Housing parts are shown on Pages 121C-6 & 122 through 123B



REF. NO.	PART NUMBER	DESCRIPTION	QTY
1	5N2926	SHUT-OFF GROUP (Separate Illustration)	1
2	3B8999	FITTING (Includes)	1
3	8F8998	NUT	1
4	3B4504	LOCKWASHER	4
5	4B3057	PIN	1
	3B4607	COTTER PIN	1
6	2N4042	TUBE--64.44 cm(25.37 in.)	

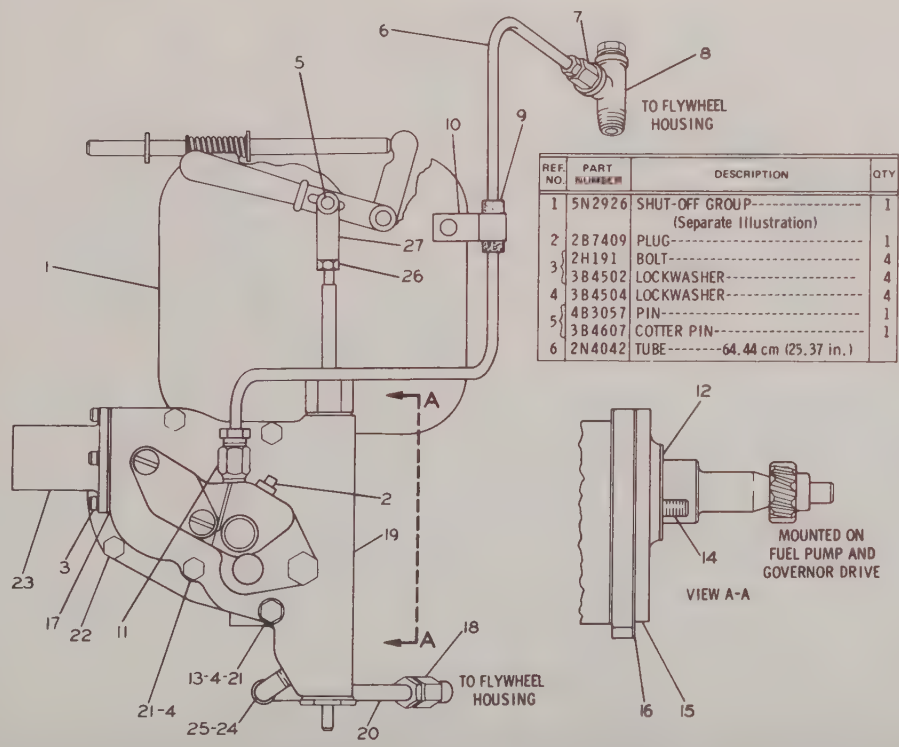


7	1F7552	FITTING (Includes)	1
	1F1344	NUT	1

C	8	60210	TEE	1
	9	4B6029	GROMMET	1
	10	1B3057	CLIP	1
	11	3B8995	FITTING (Includes)	1
		1F1344	NUT	1
	12	6B8242	GASKET	1
	13	3K6047	WASHER	1
	14	1B7182	BOLT	2
		3B4505	LOCKWASHER	2
	15	3L1867	SPACER	1
	16	2L4730	GASKET	1
	17	2B7409	PLUG	1
	18	3B8996	FITTING (Includes)	1
		8F8997	NUT	1
	19	5L1498	SHUT-OFF GROUP (Separate Illustration)	1
	20	3L8773	TUBE	1
	21	3B8695	BOLT	4
	22	9F7022	BOLT	1
C	23	7N6623	SERVICE METER	1
C	24	7N7364	ADAPTER	1
		3L5767	GASKET	1
	25	2H191	BOLT	4
		3B4502	LOCKWASHER	4
	26	6F612	NUT	1
	27	7B5005	ROD END	1
C	28	3B7262	NIPPLE	1
C	29	5M6213	PLUG	1
C	30	8H3127	BOLT	2
C	31	9S211	CLAMP	2
		THE FOLLOWING REPAIR KITS ARE AVAILABLE FOR SERVICE METER:		
C		1P4923	KIT--(window)--(Includes window, gasket & screws)	
C		8N2112	KIT--(cover)--(Includes cover assem, window, gasket & screws)	

C INDICATES CHANGE

169917



REF. NO.	PART NUMBER	DESCRIPTION	QTY
1	5N2926	SHUT-OFF GROUP (Separate Illustration)	1
2	2B7409	PLUG	1
3	2H191	BOLT	4
	3B4502	LOCKWASHER	4
4	3B4504	LOCKWASHER	4
5	4B3057	PIN	1
	3B4607	COTTER PIN	1
6	2N4042	TUBE--64.44 cm (25.37 in.)	
7	1F7552	FITTING (Includes)	1
	1F1344	NUT	1
8	3L6521	TEE	1
9	4B6029	GROMMET	1
10	1B3057	CLIP	1
11	3B8995	FITTING (Includes)	1
	1F1344	NUT	1
12	6B8242	GASKET	1
13	3K6047	WASHER	1
14	1B7182	BOLT	2
	3B4505	LOCKWASHER	2
15	3L1867	SPACER	1
16	2L4730	GASKET	1
17	3L5767	GASKET	1
18	3B8996	FITTING (Includes)	1
	8F8997	NUT	1
19	5N3675	SHUT-OFF GROUP (Separate Illustration)	1
20	3L8773	TUBE	1
21	3B8695	BOLT	4
22	9F7022	BOLT	1
23	3L1926	SERVICE METER	1
24	3B8999	FITTING (Includes)	1
25	8F8997	NUT	1
26	6F612	NUT	1
27	7B5005	ROD END	1

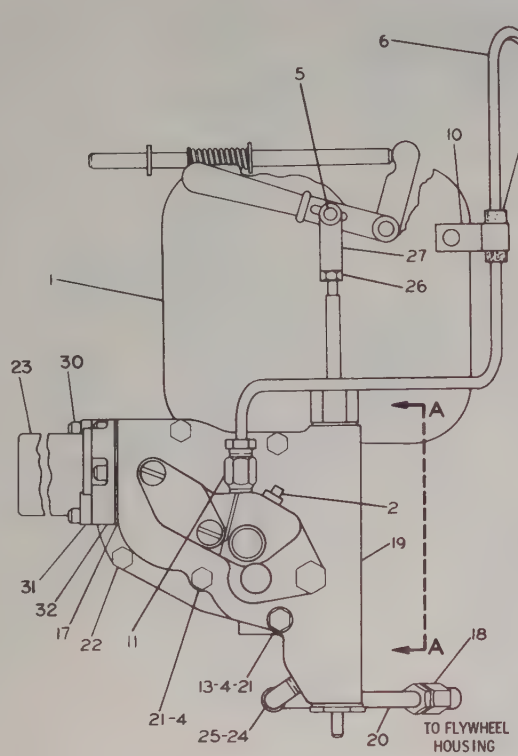
161545

5N3676 MECHANICAL SHUT-OFF GROUP—Type 1
Serial No. 46B5065—Up
5N3675 & 5N2926 Shut-Off parts are shown on Pages 121C-4 & 121C-6

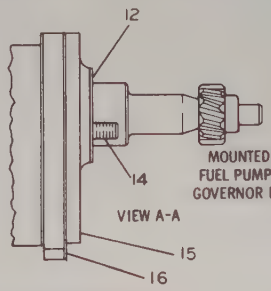
5N3676 MECHANICAL SHUT-OFF GROUP—Type 2

Serial No. 46B5065—Up

5N3675 & 5N2926 Shut-Off parts are shown on Pages 121C-4 & 121C-6



REF NO	PART NUMBER	DESCRIPTION	QTY
1	5N2926	SHUT-OFF GROUP (Separate Illustration)	1
2	2B7409	PLUG	1
3	2H191	BOLT	4
	3B4502	LOCKWASHER	4
4	3B4504	LOCKWASHER	4
5	4B3057	PIN	1
	3B4607	COTTER PIN	1
6	2N4042	TUBE--64.44 cm (25.37 in.)	

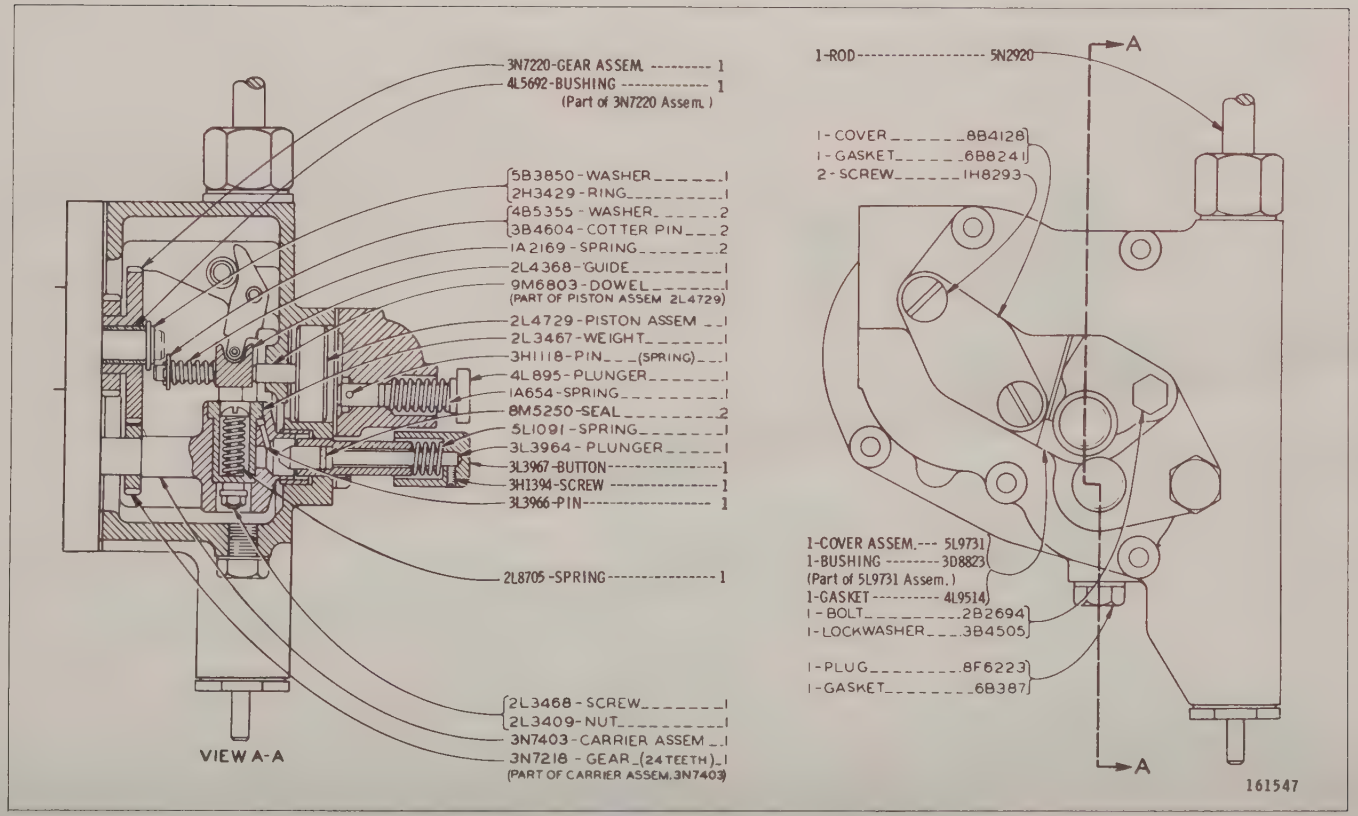


7	1F7552	FITTING (Includes)	1
	1F1344	NUT	1

C	8	60210	TEE	1
	9	4B6029	GROMMET	1
	10	1B3057	CLIP	1
	11	3B8995	FITTING (Includes)	1
		1F1344	NUT	1
	12	6B8242	GASKET	1
	13	3K6047	WASHER	1
	14	1B7182	BOLT	2
		3B4505	LOCKWASHER	2
	15	3L1867	SPACER	1
	16	2L4730	GASKET	1
	17	3L5767	GASKET	1
	18	3B8996	FITTING (Includes)	1
		8F8997	NUT	1
	19	5N3675	SHUT-OFF GROUP (Separate Illustration)	1
	20	3L8773	TUBE	1
	21	3B8695	BOLT	4
	22	9F7022	BOLT	1
C	23	7N6623	SERVICE METER GROUP	1
	24	3B8999	FITTING (Includes)	1
	25	8F8997	NUT	1
	26	6F612	NUT	1
	27	7B5005	ROD END	1
C	28	5M6213	PLUG	1
C	29	3B7262	NIPPLE	1
C	30	8H3127	BOLT	2
C	31	9S211	CLAMP	2
C	32	7N7364	ADAPTER	1
			THE FOLLOWING REPAIR KIT IS AVAILABLE FOR METER GROUP:	
		1P4923	KIT-----(window) (Includes Screws, Window & Gasket)	1
C		8N2112	KIT---------(cover) (Includes Cover Assem., Window Screws & Gasket)	

C INDICATES CHANGE

169918

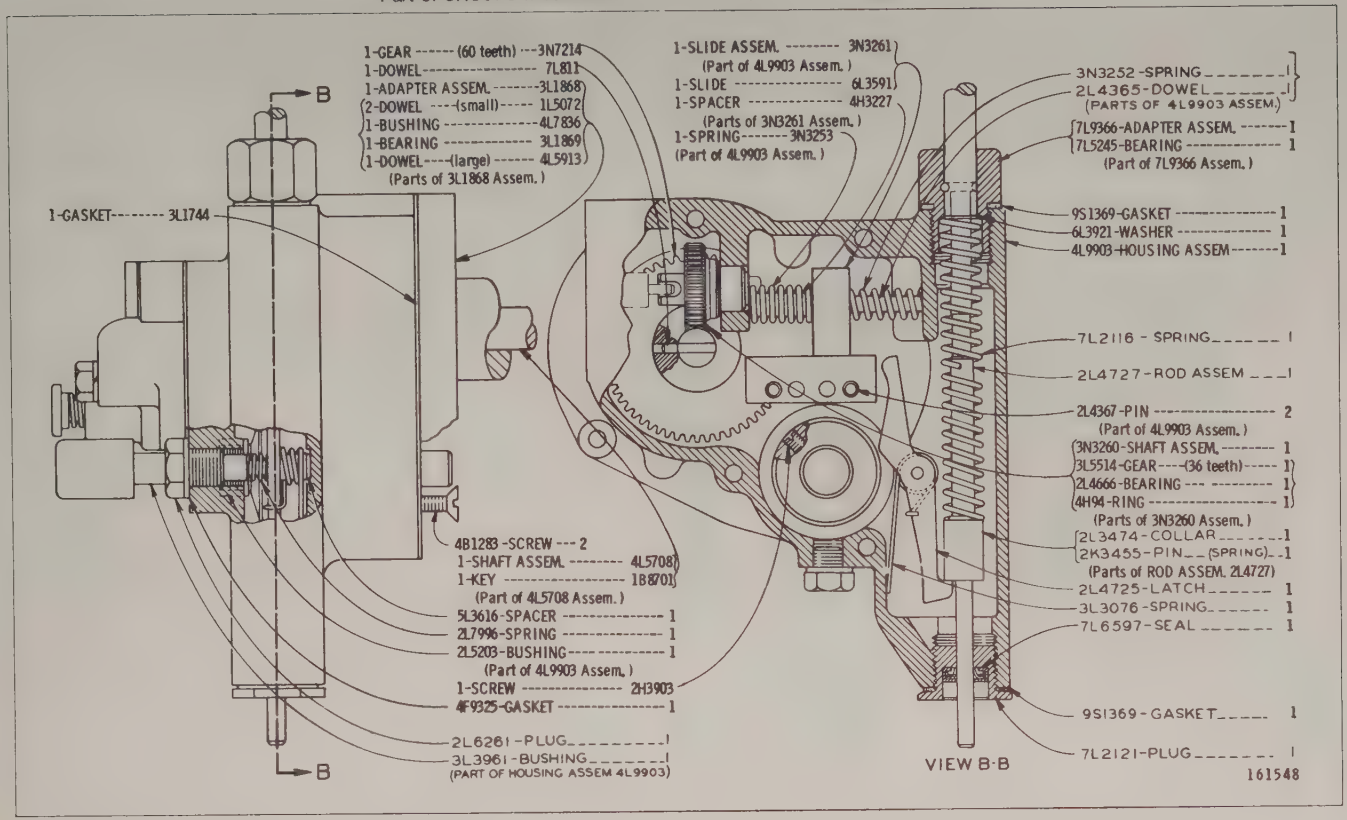


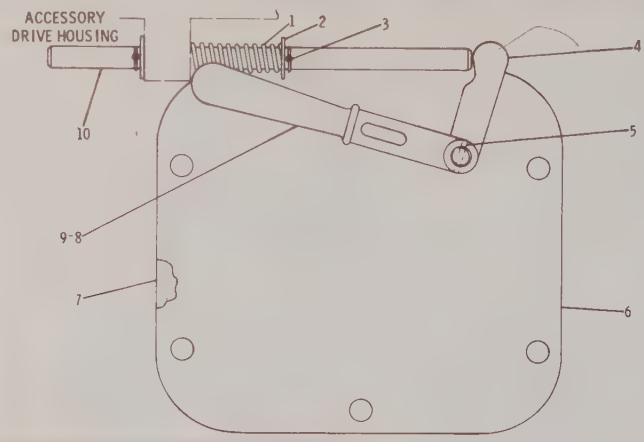
5N3675 MECHANICAL SHUT-OFF GROUP—Part 1
Serial No. 46B5065—Up
Part of 5N3676 Mechanical Shut-Off Group shown on Page 121C-3

5N3675 MECHANICAL SHUT-OFF GROUP—Part 2

Serial No. 46B5065—Up

Part of 5N3676 Mechanical Shut-Off Group shown on Page 121C-3

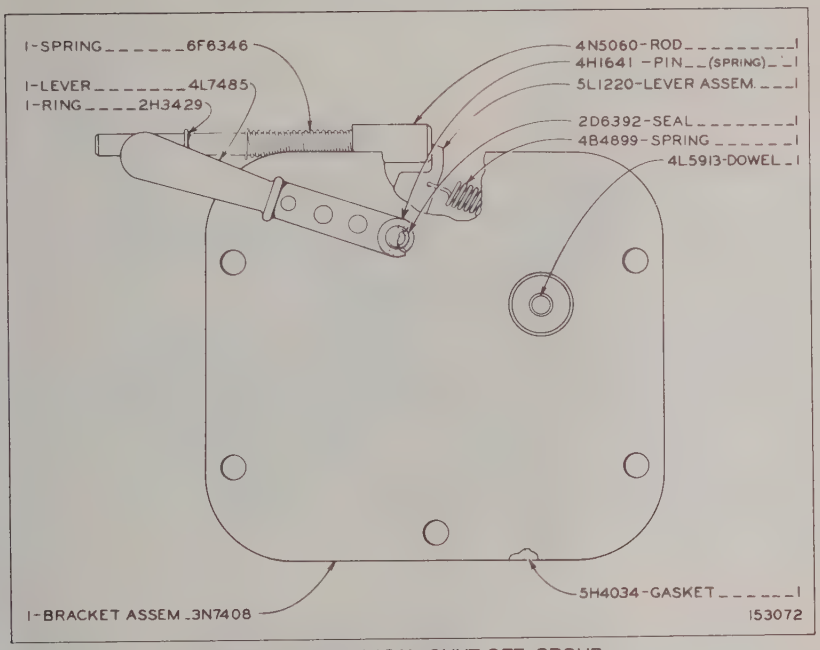




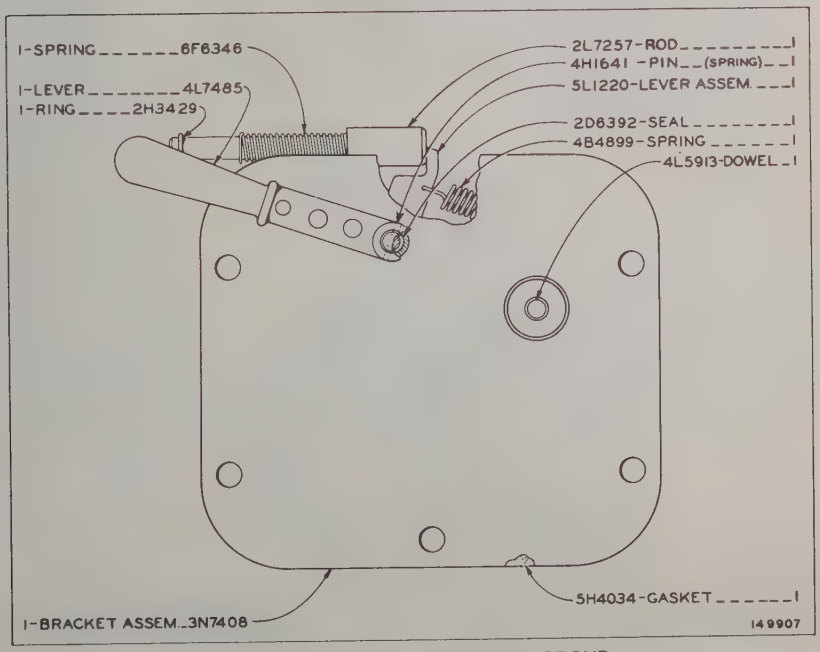
REF NO	PART NUMBER	DESCRIPTION	QTY
1	6F6346	SPRING	1
2	5B9628	WASHER	2
3	3B4615	COTTER PIN	2
4	5N2917	LEVER ASSEM.	1
5	4H1641	PIN (spring)	1
6	5N2919	BRACKET ASSEM.	1
7	5H4034	GASKET	1
8	5N2906	LEVER	1
9	2D6392	SEAL	1
10	5N2901	ROD	1

161538

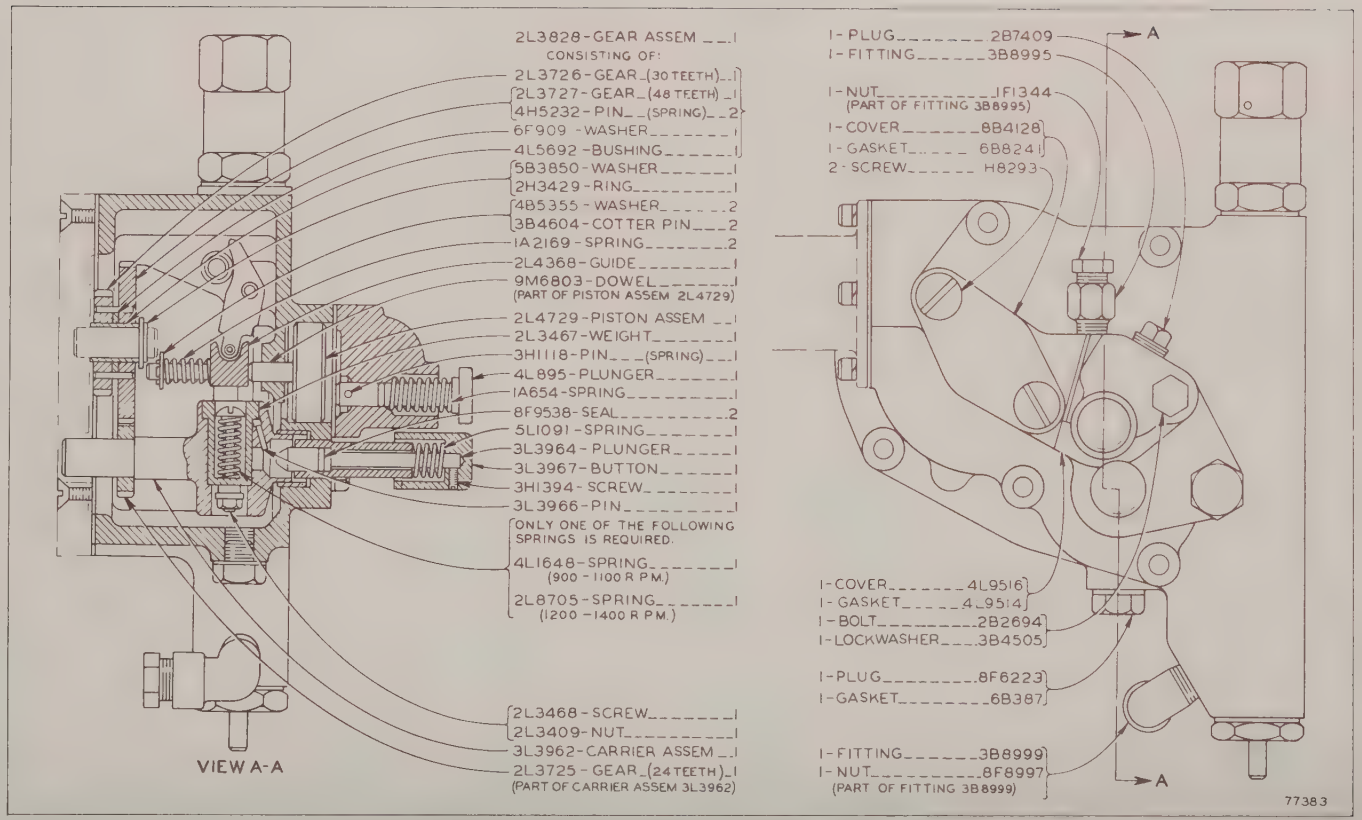
5N2926 MECHANICAL SHUT-OFF GROUP
Serial No. 46B5065—Up. Part of 5N2927 & 5N3676 Mechanical Shut-Off Groups
shown on Pages 121C-1, 121C-2 & 121C-3



3N5542 MECHANICAL SHUT-OFF GROUP
Serial No. 46B5065—Up
Part of 3N5532 Safety Mechanical Shut-Off Group

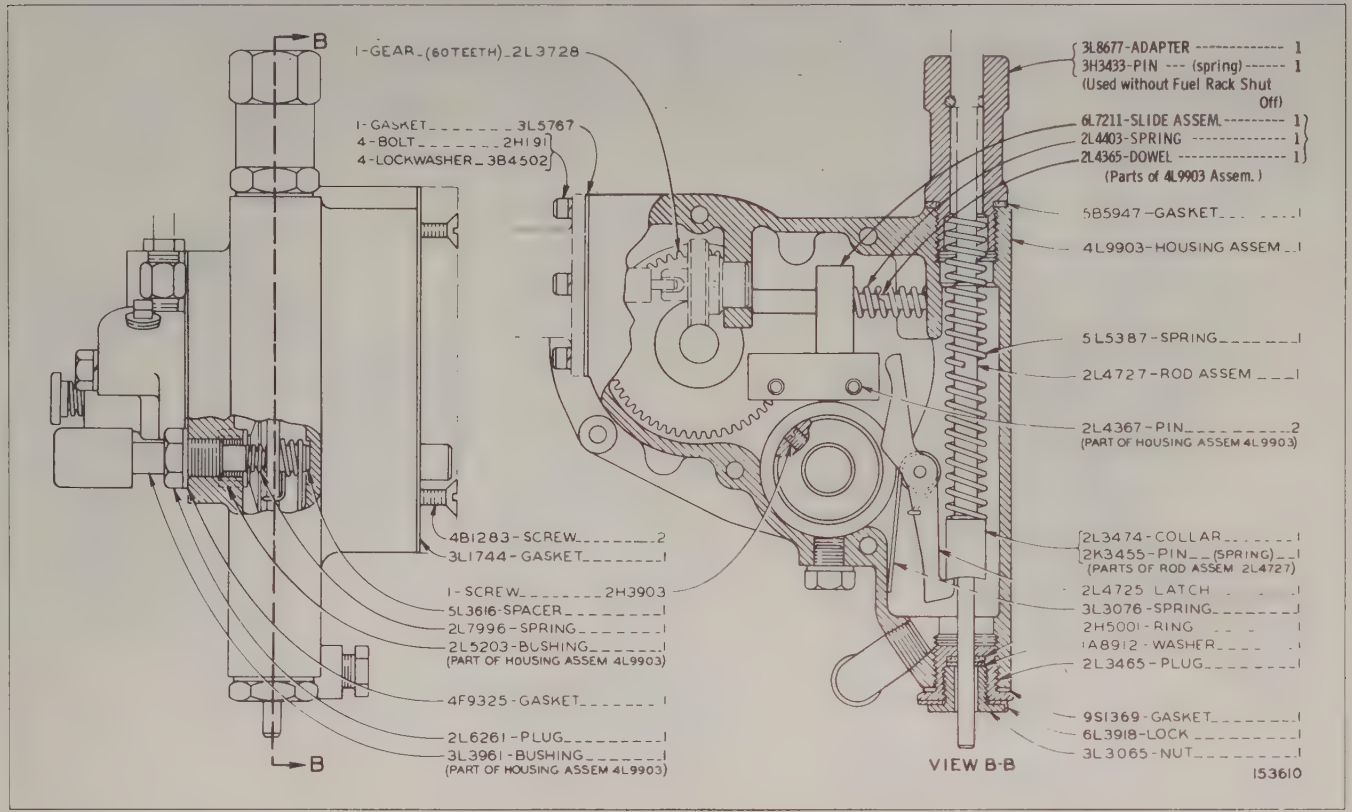


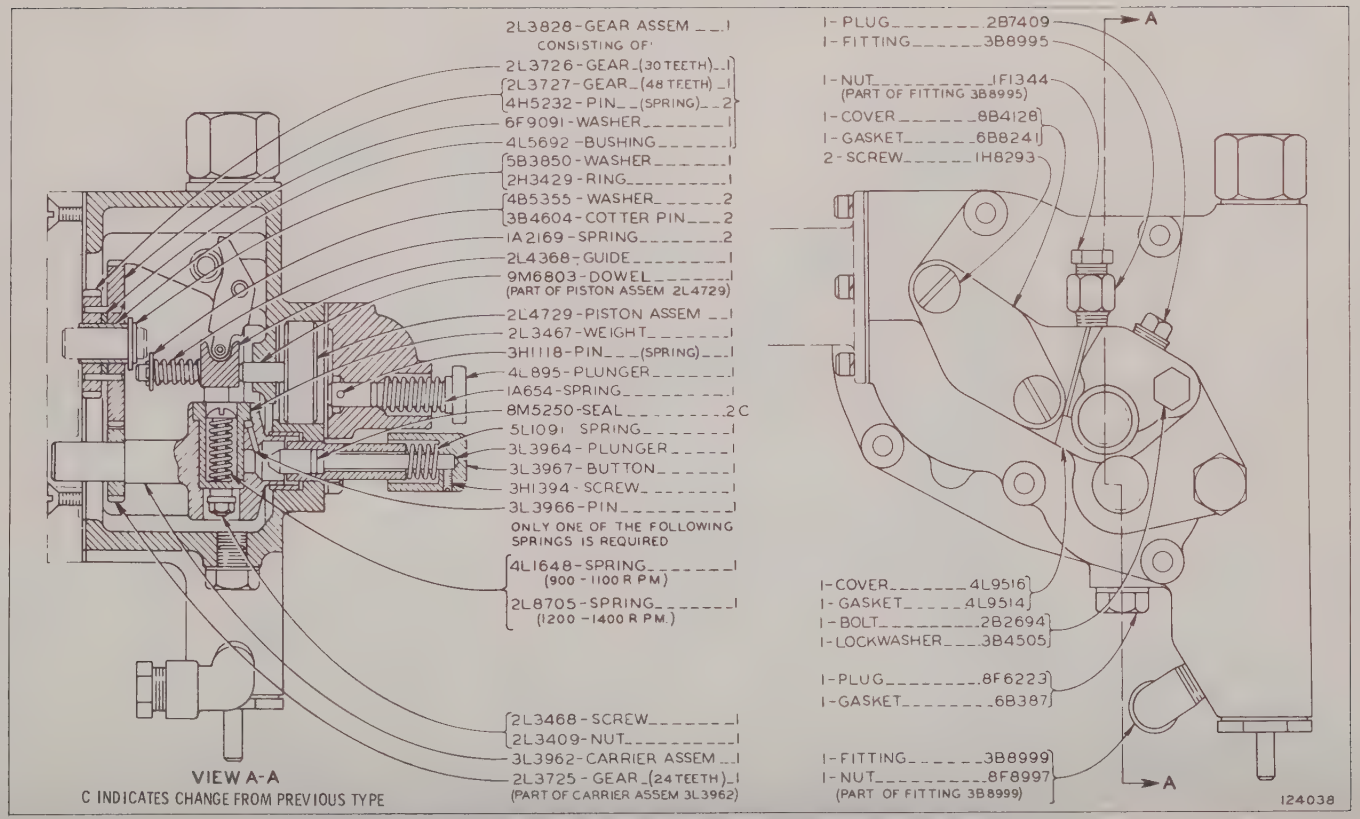
3N7409 MECHANICAL SHUT-OFF GROUP
Part of 5L7252 Oil Pressure and Overspeed Shut-Off Group shown on Page 121B



5L1498 OIL PRESSURE AND OVERSPEED HOUSING GROUP—Part 1—Type 1
Part of 5L7252, 3N5532 & 5N2927 Shut-Off Groups shown on Pages 120C through 121C-2

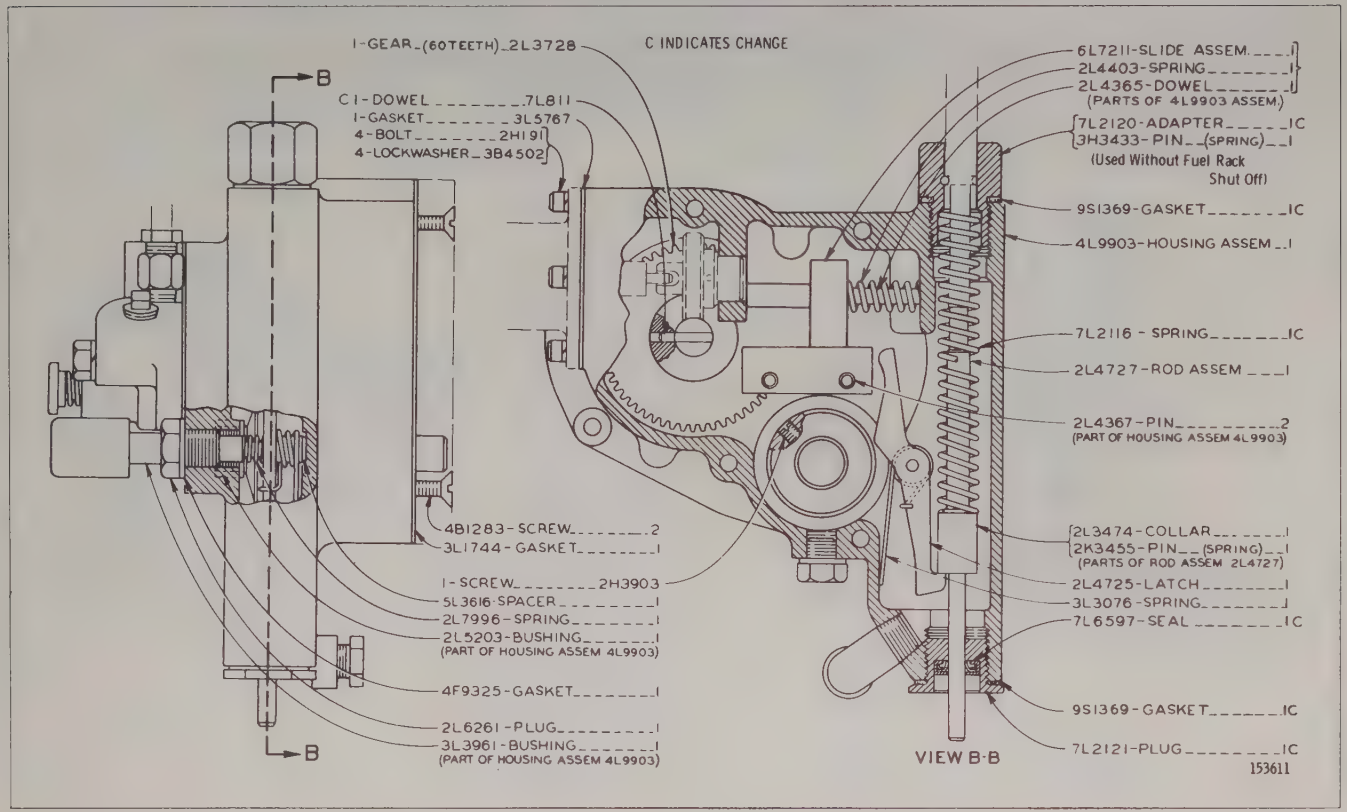
5L1498 OIL PRESSURE AND OVERSPEED HOUSING GROUP—Part 2—Type 1
Part of 5L7252, 3N5532 & 5N2927 Shut-Off Groups shown on Pages 120C through 121C-2

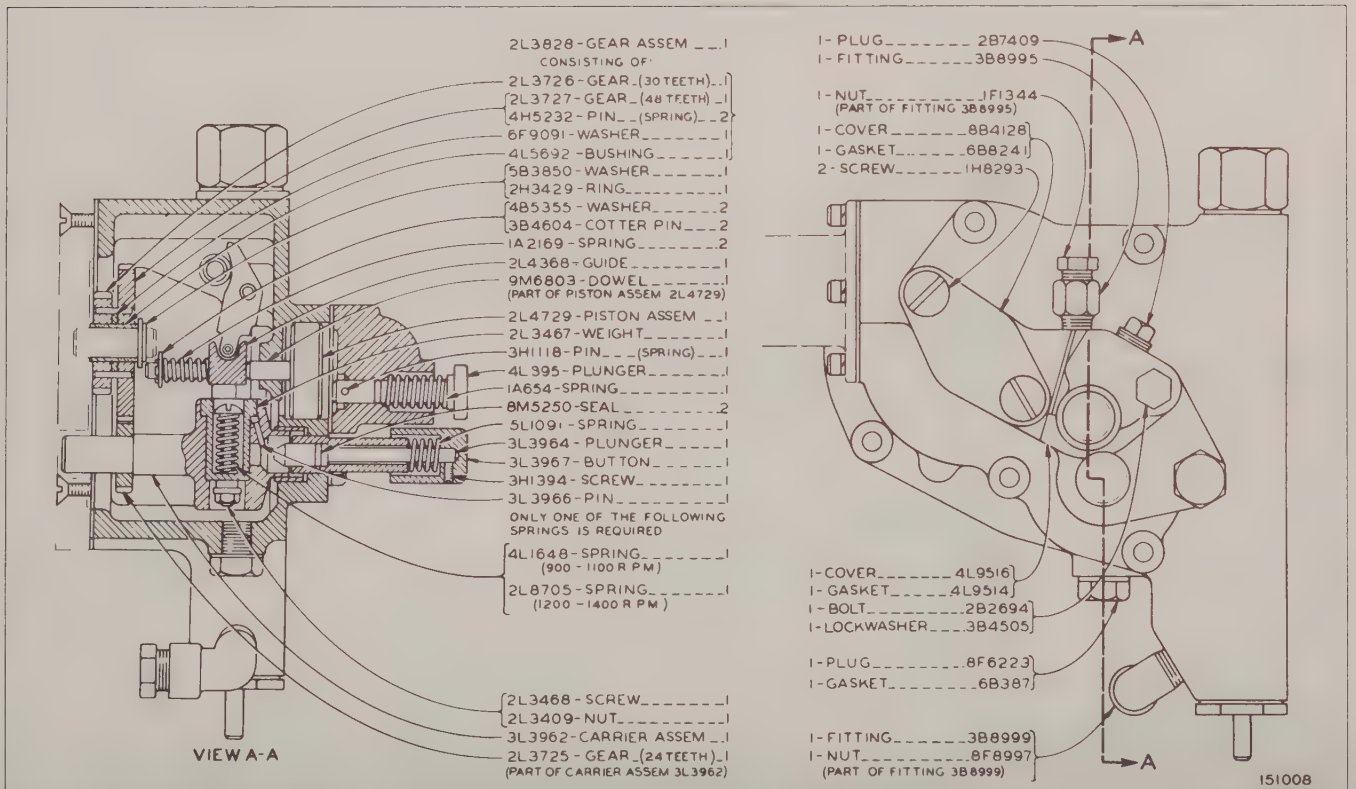




5L1498 OIL PRESSURE AND OVERSPEED HOUSING GROUP—Part 1—Type 2
Part of 5L7252, 3N5532 & 5N2927 Shut-Off Group shown on Pages 120C through 121C-2

5L1498 OIL PRESSURE AND OVERSPEED HOUSING GROUP—Part 2—Type 2
Part of 5L7252, 3N5532 & 5N2927 Shut-Off Groups shown on Pages 120C through 121C-2

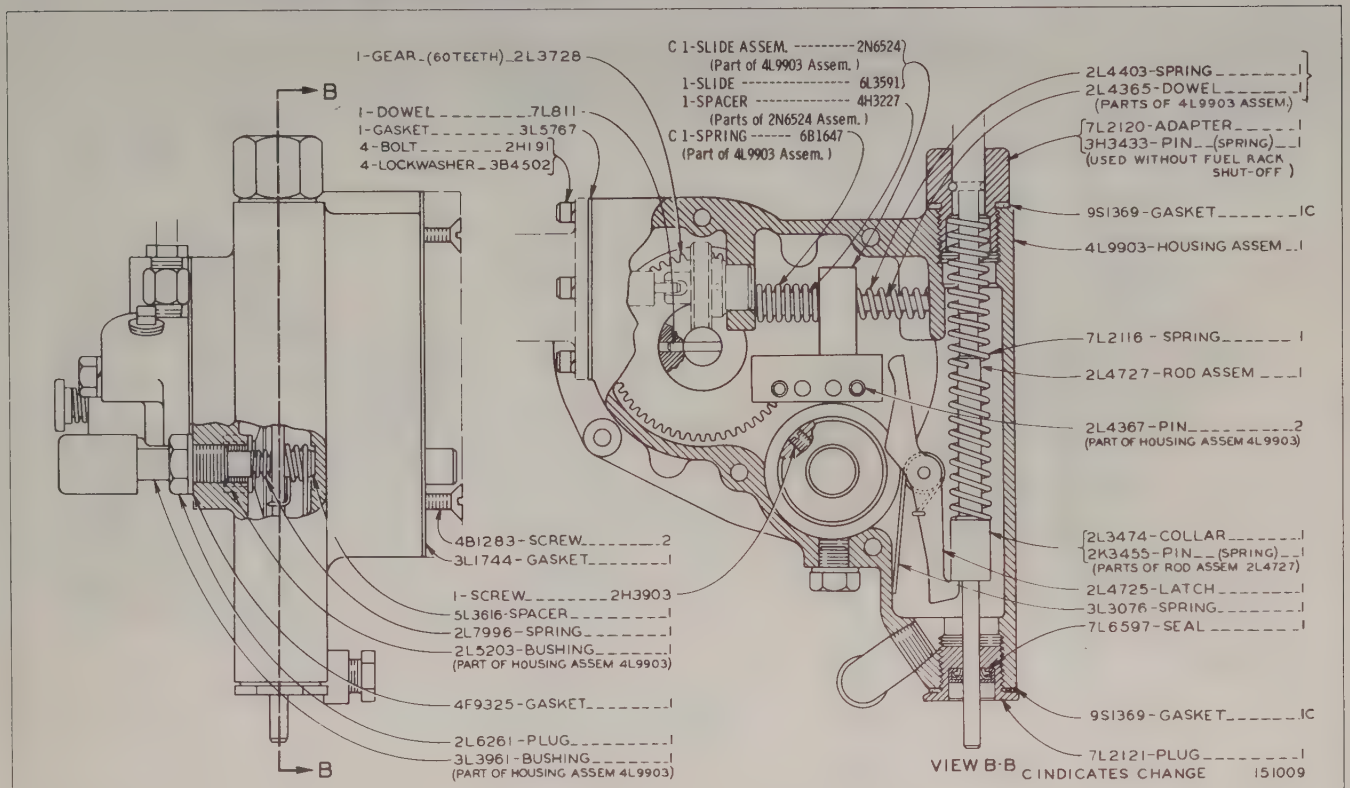


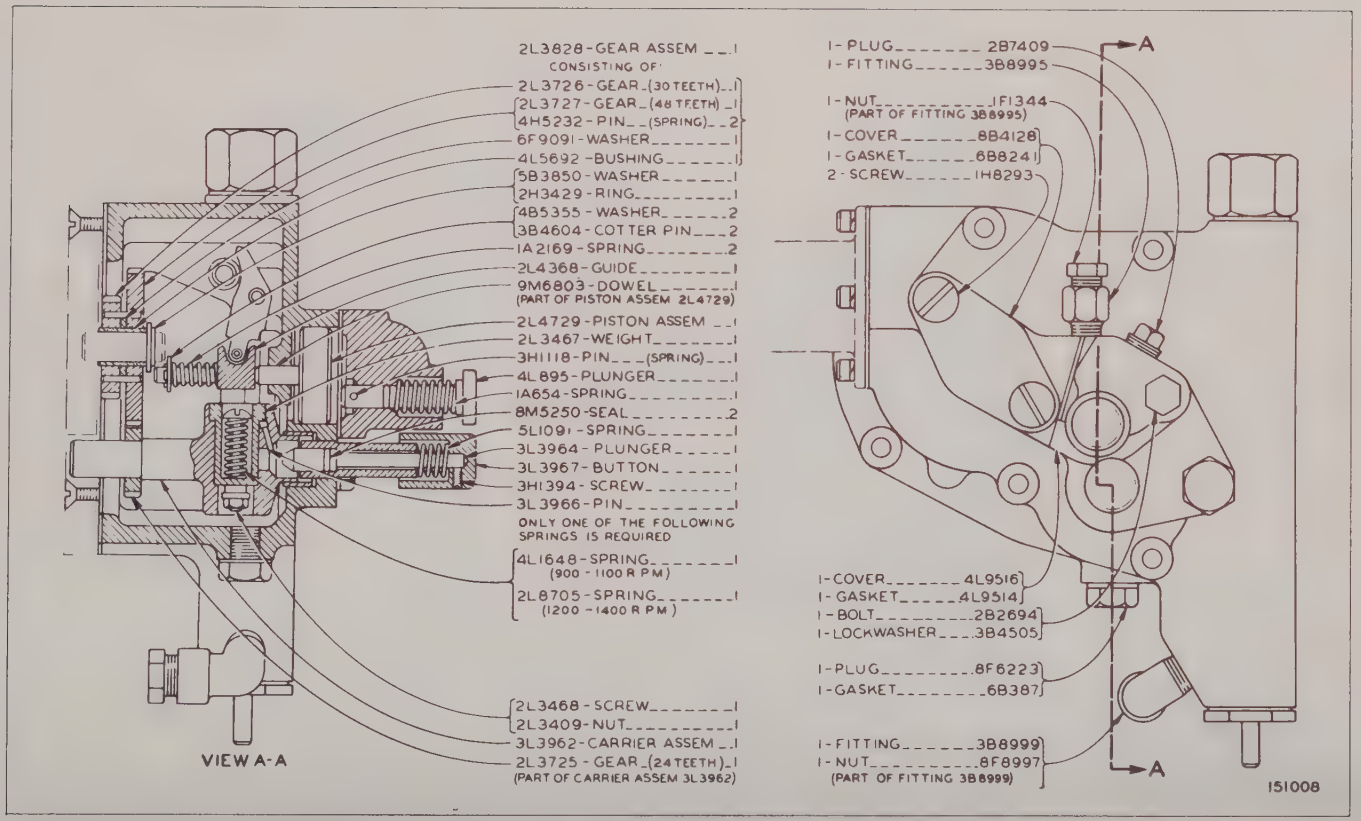


5L1498 OIL PRESSURE AND OVERSPEED HOUSING GROUP—Part 1—Type 3
Part of 5L7252, 3N5532 & 5N2927 Shut-Off Groups shown on Pages 120C through 121C-2

5L1498 OIL PRESSURE AND OVERSPEED HOUSING GROUP—Part 2—Type 3

Part of 5L7252, 3N5532 & 5N2927 Shut-Off Groups shown on Pages 120C through 121C-2

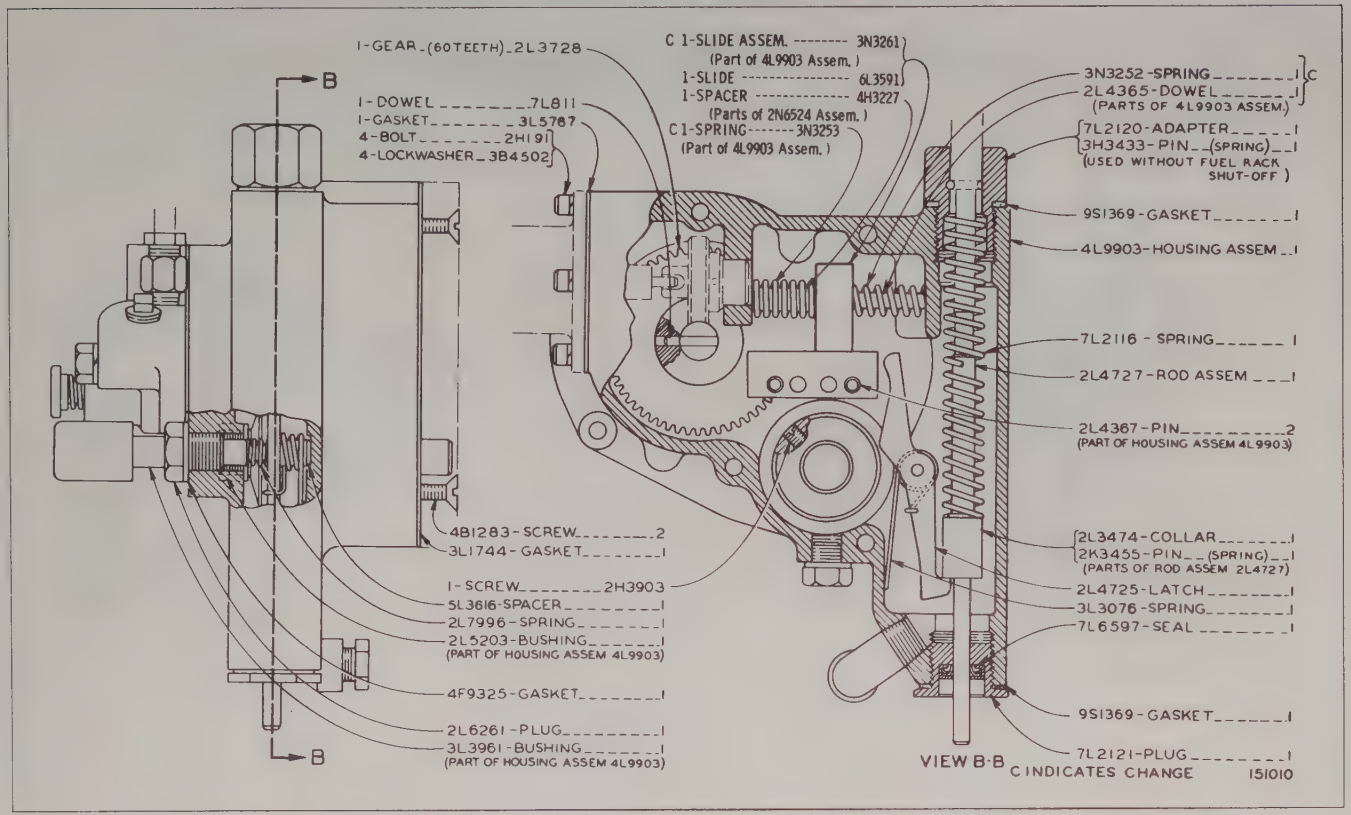


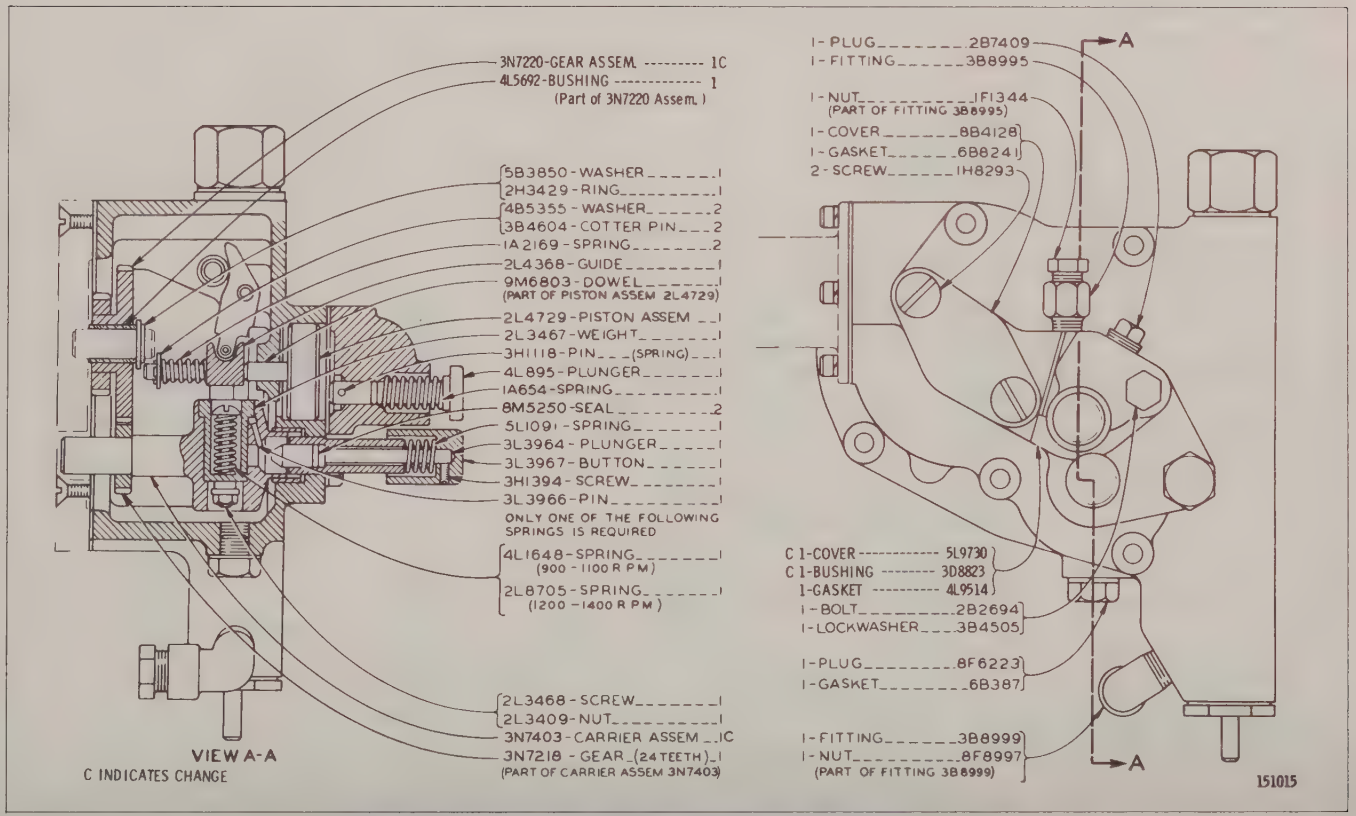


5L1498 OIL PRESSURE AND OVERSPEED HOUSING GROUP—Part 1—Type 4
Part of 5L7252, 3N5532 & 5N2927 Shut-Off Groups shown on Pages 120C through 121C-2

5L1498 OIL PRESSURE AND OVERSPEED HOUSING GROUP—Part 2—Type 4

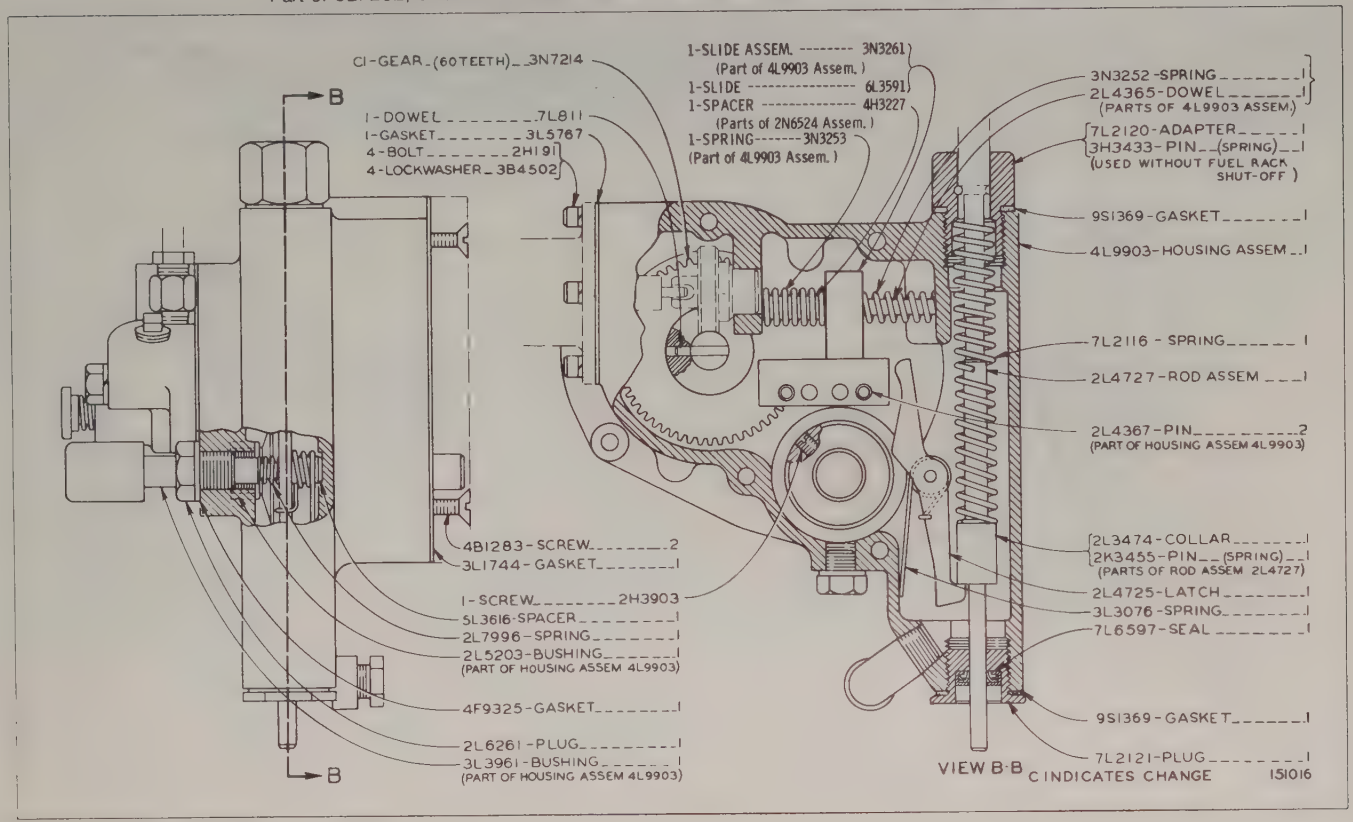
Part of 5L7252, 3N5532 & 5N2927 Shut-Off Groups shown on Pages 120C through 121C-2

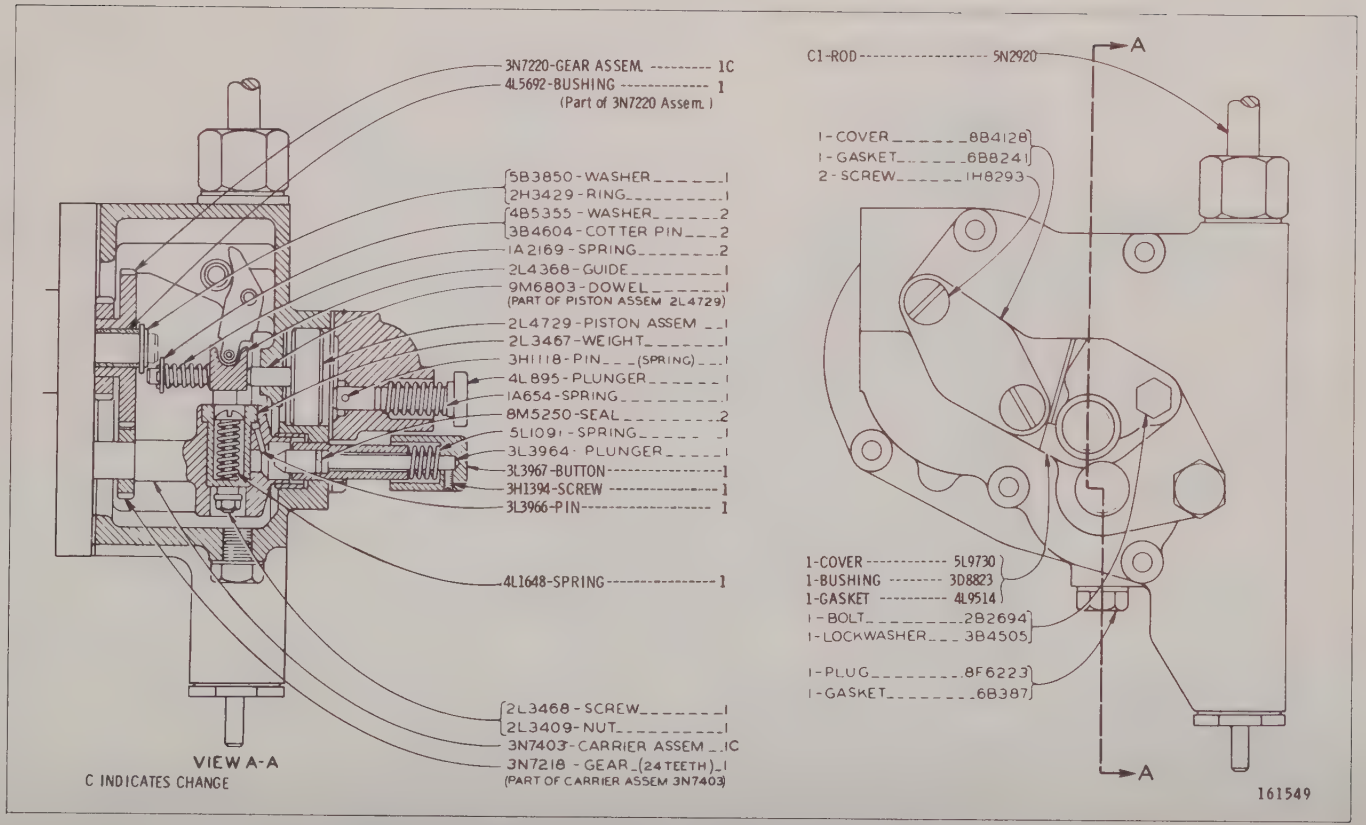




5L1498 OIL PRESSURE AND OVERSPEED HOUSING GROUP—Part 1—Type 5
Part of 5L7252, 3N5532 & 5N2927 Shut-Off Groups shown on Pages 120C through 121C-2

5L1498 OIL PRESSURE AND OVERSPEED HOUSING GROUP—Part 2—Type 5
Part of 5L7252, 3N5532 & 5N2927 Shut-Off Groups shown on Pages 120C through 121C-2

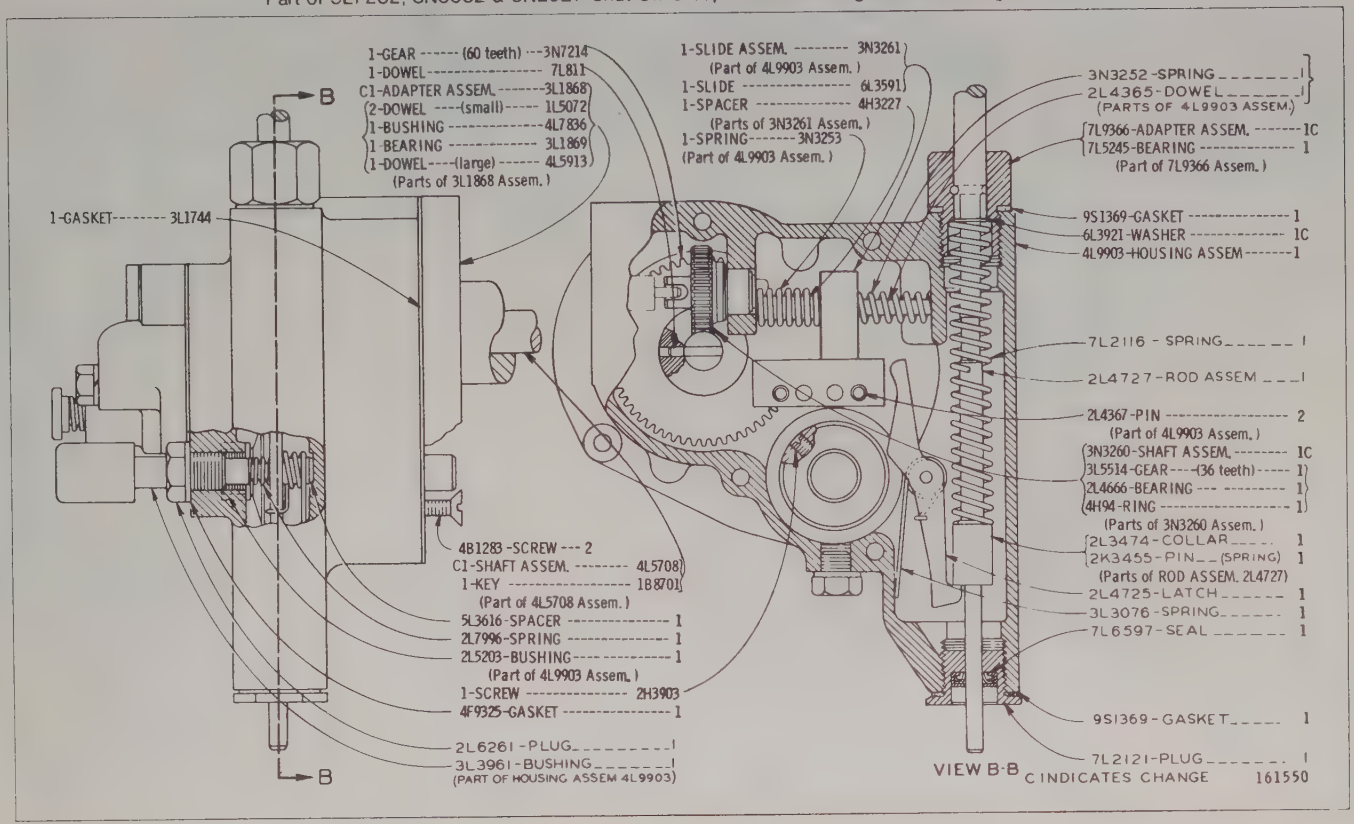




5L1498 MECHANICAL SHUT-OFF GROUP—Part 1—Type 6
Part of 5L7252, 3N5532 & 5N2927 Shut-Off Groups shown on Pages 120C through 121C-2

5L1498 MECHANICAL SHUT-OFF GROUP—Part 2—Type 6

Part of 5L7252, 3N5532 & 5N2927 Shut-Off Groups shown on Pages 120C through 121C-2



PART NO.	DESCRIPTION	TYPE OF CONTROL							
		RIGHT HAND				LEFT HAND			
		POSITIVE LOCK	REMOTE CABLE	VERNIER	AIR ACTUATOR	POSITIVE LOCK	REMOTE CABLE	VERNIER	AIR ACTUATOR
3L8869	CONTROL GROUP	■	■		■				
5L2518	CONTROL GROUP					■	■		■
5L1605	MOUNTING GROUP	■	■	■	■				
4L6811	LEVER GROUP		■	■			■	■	
4L7604	HANDLE GROUP			■				■	
4L9581	LINK GROUP			■				■	
2L6745	ACTUATOR GROUP				■				■
3L2777	BRACKET		■						
5L7257	BRACKET ASSEMBLY				■				■
5L2086	BRACKET			■					
5L2074	LEVER ASSEMBLY								■
4L7600	LEVER				■				
4L7527	QUADRANT								■
4L7525	BUSHING								■
5L1912	PLATE							■	
5L2087	SPACER (3 REQUIRED)				■				
5L1859	CLIP						■		
5L2071	STRAP				■				■
5L2172	STRAP				■				
5L7478	STRAP				■				■
1A302	SPRING		■				■		
———	HARDWARE - LIST A						■	■	
———	HARDWARE - LIST B				■				■

LIST A

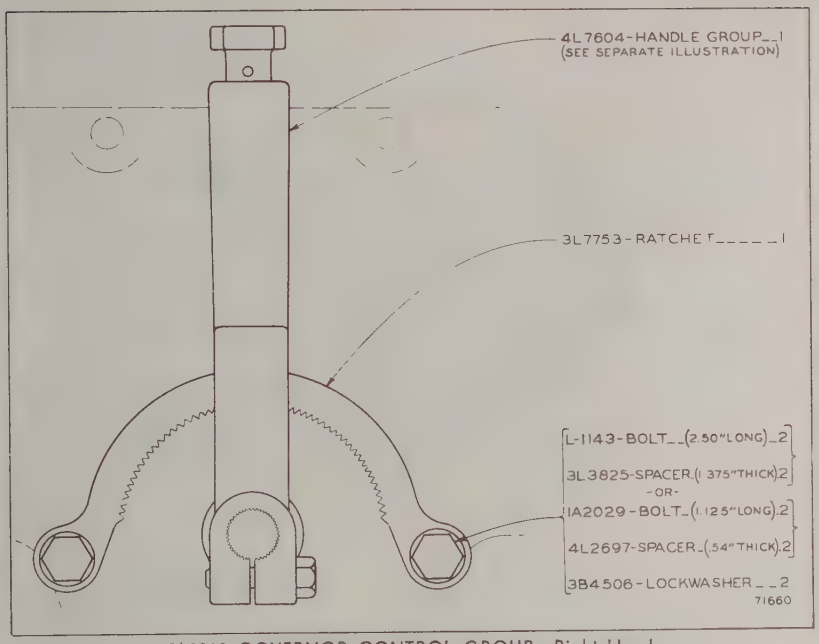
2 - 3L8855 SPACER
2 - 1B7182 BOLT 5/16'' X 1/1/4''
1 - S1618 BOLT 5/16'' X 1''

LIST B

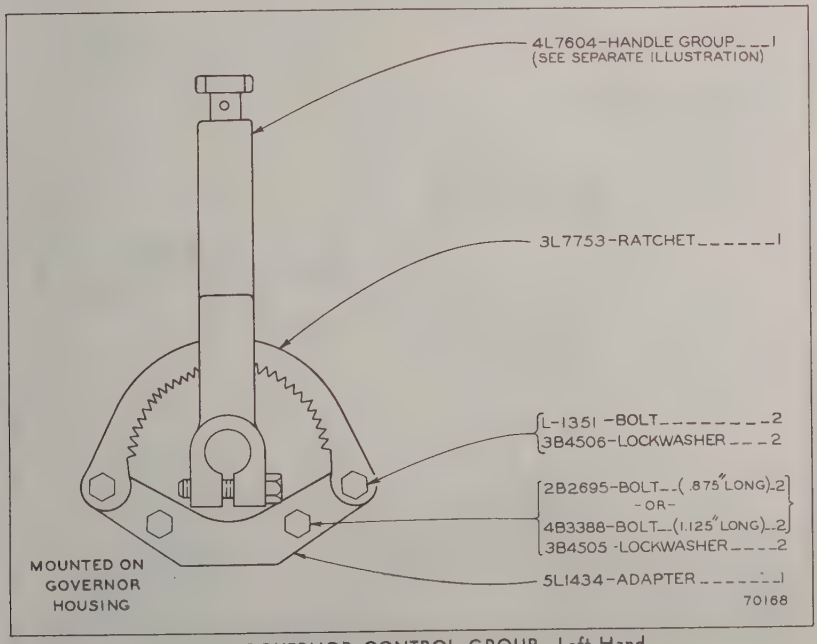
1 - 4B3388 BOLT 5/16'' X 1 1/8''
1 - 1D4540 BOLT 3/16'' X 2 3/4''
2 - 1F5842 BOLT 5/16'' X 3 1/4''
4 - L1351 BOLT 3/8'' X 7/8''
3 - S1617 BOLT 5/16'' X 3/4''
4 - 3B4505 LOCKWASHER 5/16''
4 - 3B4506 LOCKWASHER 3/8''
2 - 4B4277 WASHER 11/32''
1 - 1A8285 NUT - LOCK 5/16''
1 - 1D4716 NUT - HEX 5/16''
2 - 3B4607 COTTER 3/32'' X 1/2 ''
1 - 5H4499 GASKET
1 - 4L7513 ROD-GOVERNOR CONTROL
1 - 4F1001 END - YOKE
2 - 2A4133 PIN - YOKE END
1 - 5H9942 SEAL
1 - 5H9943 WIRE

77520

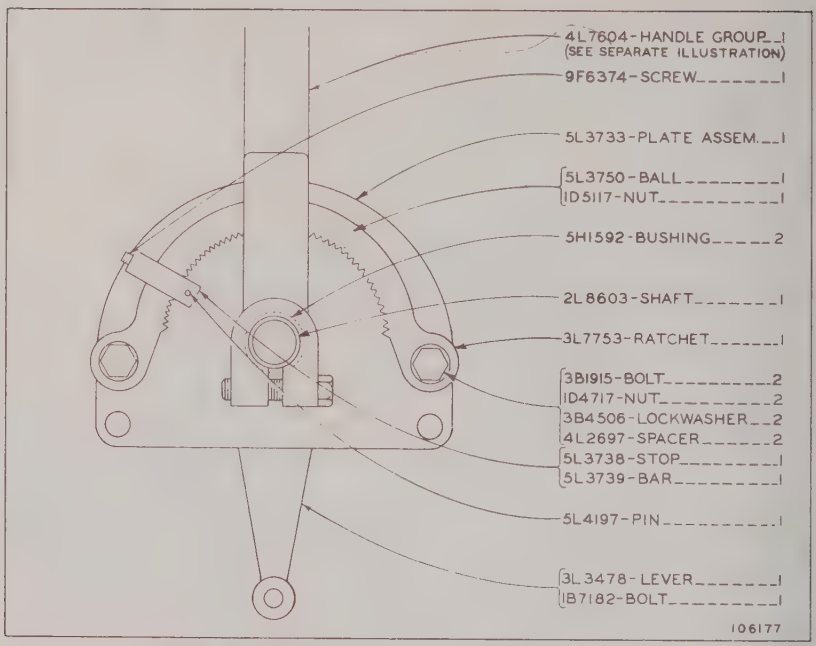
GOVERNOR CONTROL CHART



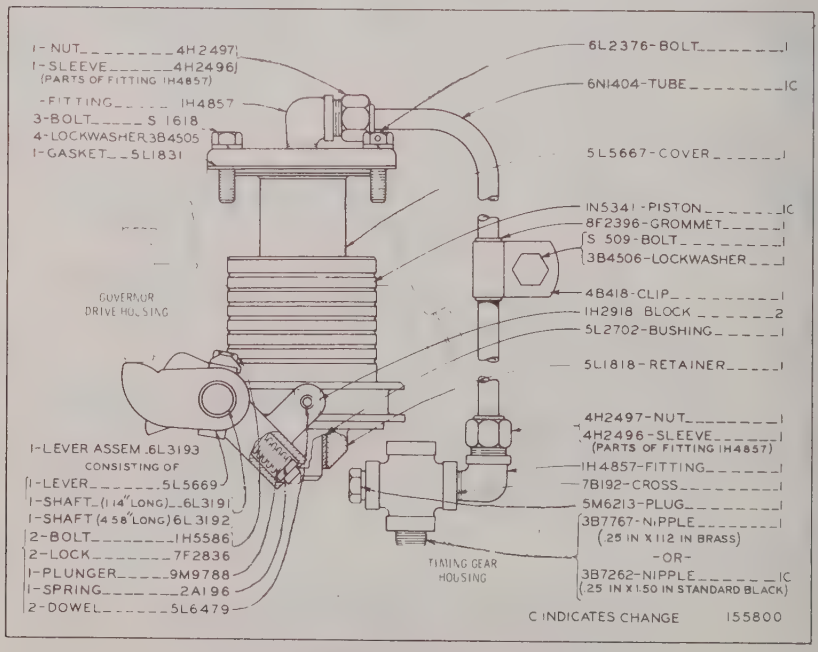
3L8869 GOVERNOR CONTROL GROUP—Right Hand
4L7604 Handle Group parts are shown on Page 127
Refer to Page 124 for usage



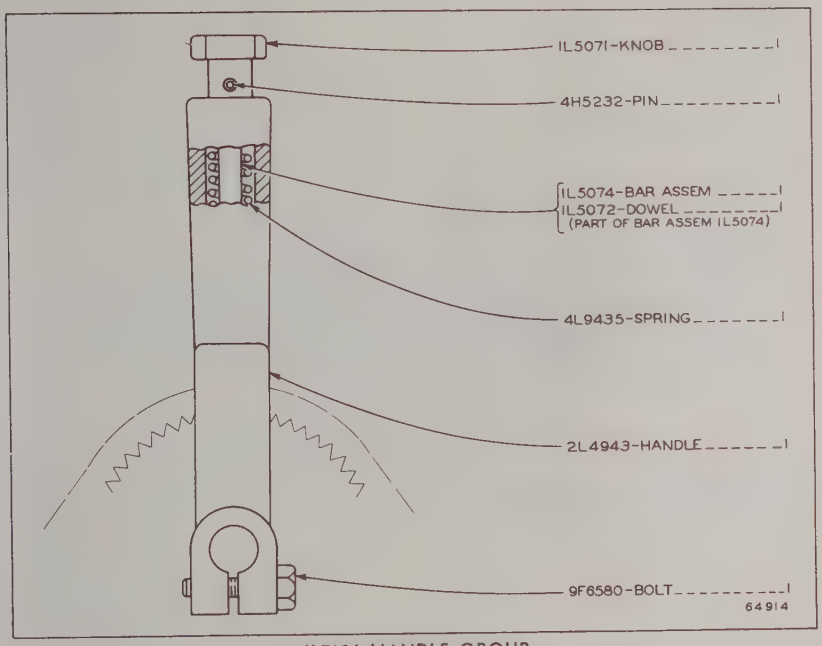
5L2518 GOVERNOR CONTROL GROUP—Left Hand
4L7604 Handle Group parts are shown on Page 127
Refer to Page 124 for usage



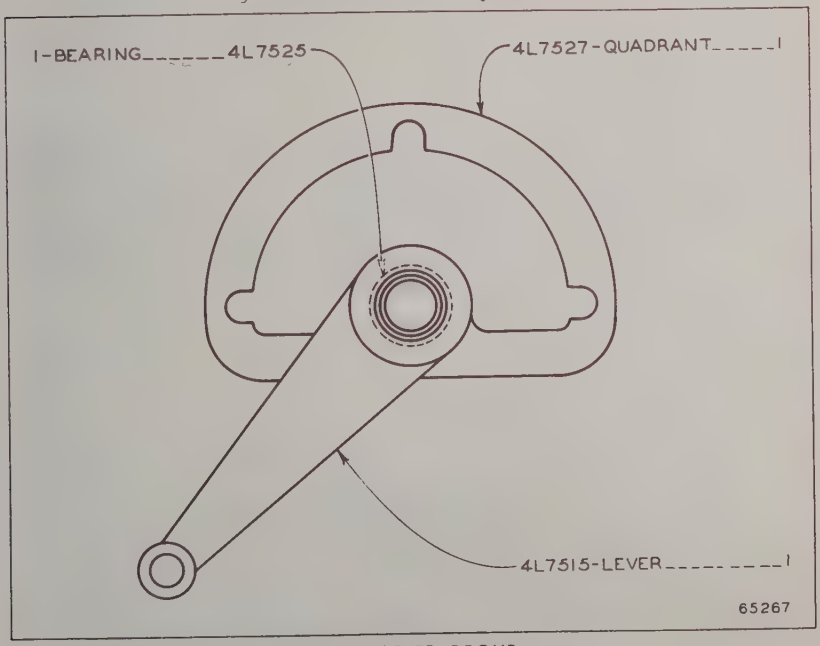
5L3693 GOVERNOR CONTROL GROUP—Remote Mounted
4L7604 Handle Group parts are shown on Page 127



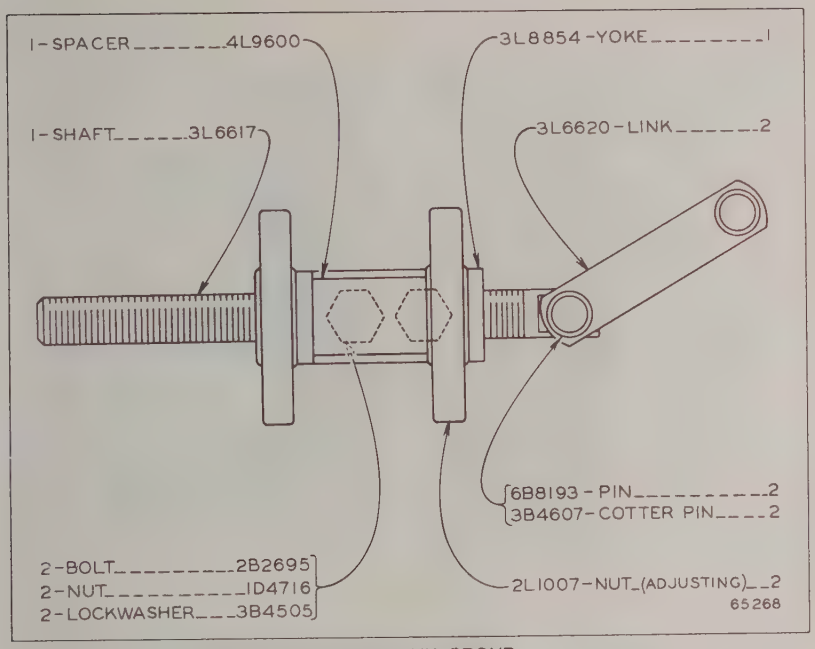
6L3194 GOVERNOR CONTROL GROUP—Hydraulic
Serial No. 46B1558 to 46B5064 inclusive



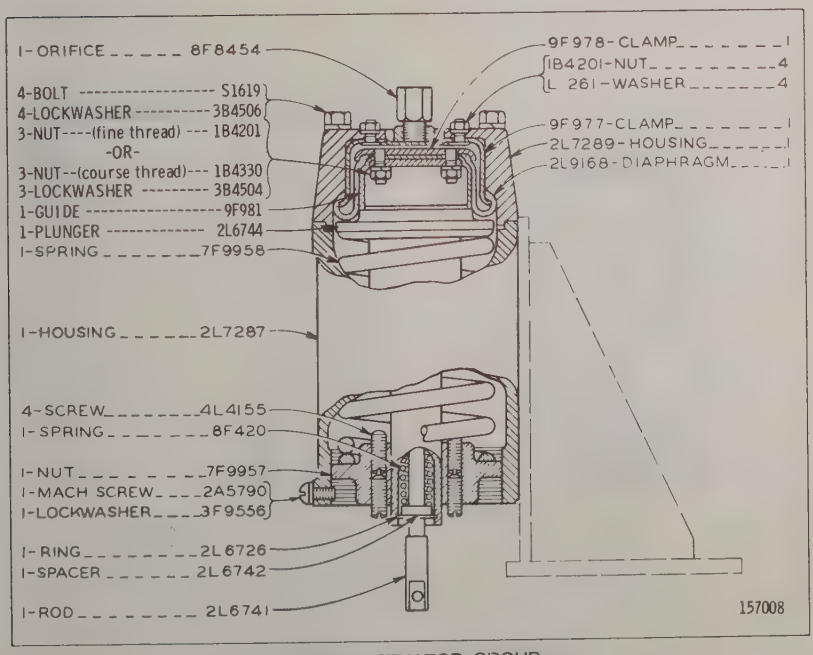
4L7604 HANDLE GROUP
Also part of 3L8869, 5L2518, and 5L3693 Governor Control Groups shown on Pages 125 and 126. Refer to Page 124 for usage



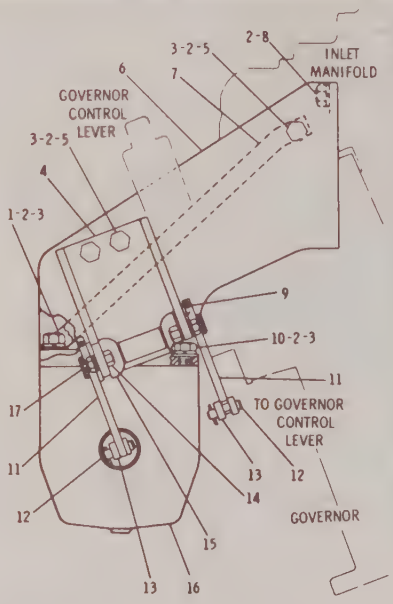
4L6811 LEVER GROUP
Refer to Page 124 for usage



4L9581 LINK GROUP
Refer to Page 124 for usage



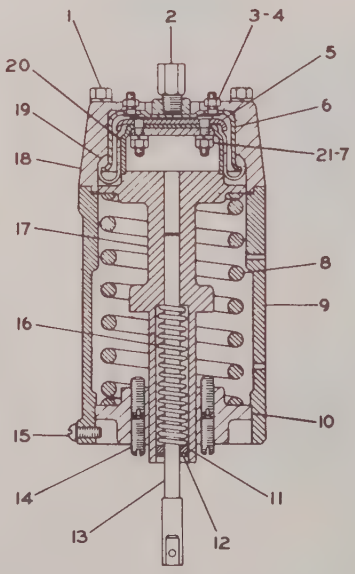
2L6745 ACTUATOR GROUP
Serial No. 46B1558 to 46B5064 inclusive
Refer to Page 124 for usage



REF NO	PART NUMBER	DESCRIPTION	QTY
1	3H6622	BOLT	1
2	3B4506	LOCKWASHER	14
3	4B4278	WASHER	8
4	3N5874	BRACKET	1
5	3H5842	BOLT	3
	1D4717	NUT	3
6	3N5875	BRACKET	1
7	3N5873	BRACKET	1
8	3H5844	BOLT	6
9	1M1254	BOLT	2
10	3H5841	BOLT	4
11	3N4892	LEVER	2
12	2A4133	PIN	4
	3B4607	COTTER PIN	4
	3D5878	END	4
13	3N2775	ROD	2
	1B4202	NUT	4
14	5M6755	BOLT	4
	4B2047	NUT	4
	3B4502	LOCKWASHER	4
	4B4274	WASHER	4
15	6L7752	BEARING	2
16	Not Serv	CONTROL GROUP (Separate Illustration)	1
17	3N5876	SHAFT	1

153069

3N5862 AIR ACTUATED GOVERNOR CONTROL GROUP
Serial No. 46B5065—Up

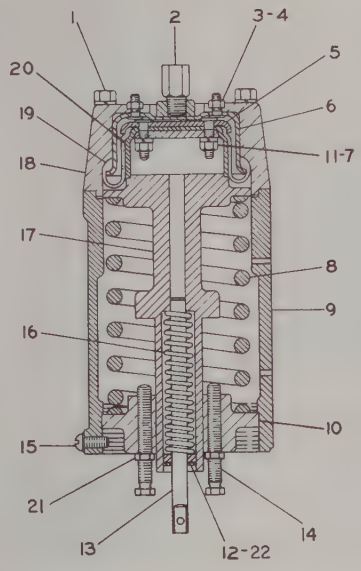


REF NO.	PART NUMBER	DESCRIPTION	QTY
1	S1619	BOLT	4
	3B4506	LOCKWASHER	4
2	8F8454	ORFICE	1
3	1B4201	NUT	4
4	L261	WASHER	4
5	9F978	CLAMP ASSEM.	1
6	9F977	CLAMP ASSEM.	1
7	3B4504	LOCKWASHER	3
8	7F9958	SPRING	1
9	2L7287	HOUSING	1
10	7F9957	NUT	1
11	2L6742	SPACER	1
12	2L6726	RING	1
13	2N6004	ROD	1
14	4L4155	SCREW	4
15	2A5790	SCREW	1
	3F9556	LOCKWASHER	1
16	2N6005	SPRING	1
17	2L6744	PLUNGER	1
18	2L7289	HOUSING	1
19	2L9168	DIAPHRAGM	1
20	9F981	GUIDE	1
21	1B4201	NUT (fine thread)	3
		-OR-	
C	1B4330	NUT (coarse thread)	3

C INDICATES CHANGE

156877

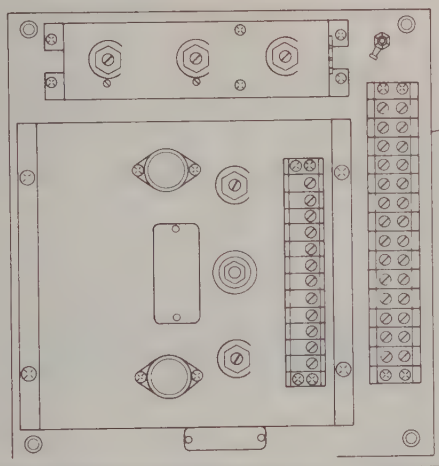
2N6006 AIR ACTUATOR GROUP—Type 1
Serial No. 46B5065—Up
Part of 3N5862 Air Actuated Governor Control Group



	REF NO.	PART NUMBER	DESCRIPTION	QTY.
	1	1S1619	BOLT	4
		3B4506	LOCKWASHER	4
	2	8F8454	ORIFICE	1
	3	1B4201	NUT—11.11 in. (.437 mm)	4
			- OR -	
C		1B4330	NUT—5.54 in. (.218 mm)	4
	4	L261	WASHER	4
	5	9F978	CLAMP ASSEM.	1
	6	9F977	CLAMP ASSEM.	1
	7	3B4504	LOCKWASHER	3
	8	7F9958	SPRING	1
	9	2L7287	HOUSING	1
C	10	3N9096	NUT	1
	11	1B4330	NUT	3
	12	2L6726	RING	1
	13	2N6004	ROD	1
C	14	102461	SCREW	2
	15	2A5790	SCREW	1
		3F9556	LOCKWASHER	1
	16	2N6005	SPRING	1
	17	2L6744	PLUNGER	1
	18	2L7289	HOUSING	1
	19	2L9168	DIAPHRAGM	1
	20	9F981	GUIDE	1
C	21	1B2578	NUT	2
	22	2L6742	SPACER	1

C INDICATES CHANGE 232345

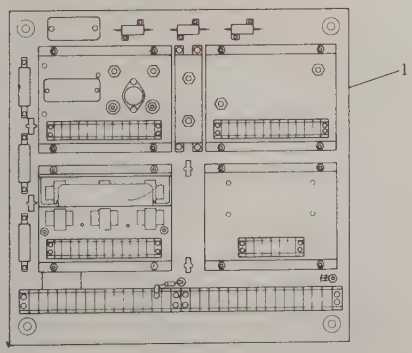
2N6006 AIR ACTUATOR GROUP—Type 2
Serial No. 46B5065—Up
Part of 3N5862 Air Actuated Governor Control Group shown on Page 128



REF NO	PART NUMBER	DESCRIPTION	QTY
1	2N9800	CONTROL ASSEM.	1
2	4N4696	SWITCH	1
	REG00899	FORM-----(EG-3P Actuator)-------	1
	REG01230	FORM------(Standby Control)------	1
	REG00900	FORM----(12 Volt Control)--------	1

119254

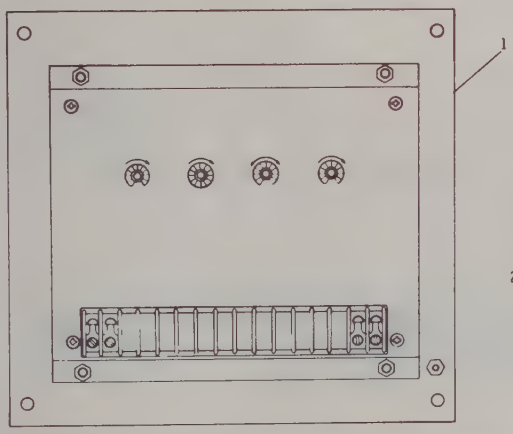
4N5325 GOVERNOR CONTROL GROUP—Standby—
Replaced by 7N240 shown on Page 128-1b



REF NO	PART NUMBER	DESCRIPTION	QTY
1	4N5358	CONTROL GROUP (Separate Illustration)	1
2	2N7744	SWITCH	1
	REG00899	FORM------(EG-3P Actuator)------	1
	REG01231	FORM-----(load control assem.)----	1

148291

4N5326 GOVERNOR CONTROL GROUP—Load Sharing—
Replaced by 7N241 shown on Page 128-1b
4N5358 Control parts are shown on Page 128-4

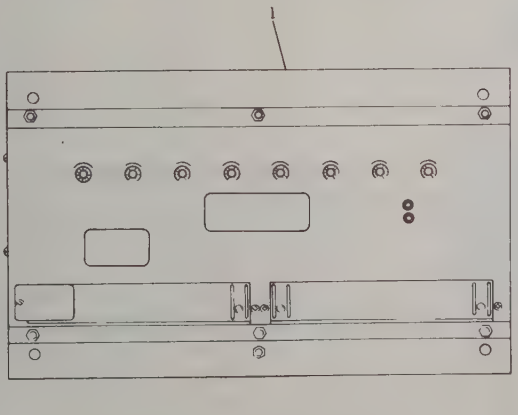


REF NO	PART NUMBER	DESCRIPTION	QTY
1	7N182	CONTROL ASSEM.	1
2	2N7744	SWITCH (Lube oil pressure-use as required)	1

SEHS7367	FORM (Engine Data Sheet-2301 Electric Governors)		1

C INDICATES CHANGE 222339

7N240 GOVERNOR CONTROL GROUP—Standby
Replaced by 8N1731 shown on Page 128-2

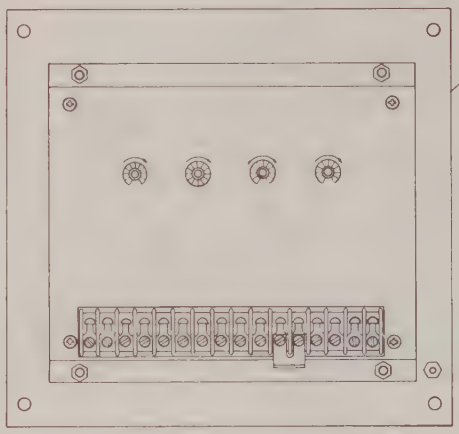


	REF NO	PART NUMBER	DESCRIPTION	QTY
C	1	7N5581	CONTROL ASSEM.	1
	2	2N7744	SWITCH (Lube oil pressure-use as required)	1

C	LEHX1242	FORM (Engine Data Sheet-2301 Electric Governors)		1

C INDICATES CHANGE 222246

7N241 GOVERNOR CONTROL GROUP—Load Sharing
Replaced by 8N1730 shown on Page 128-3

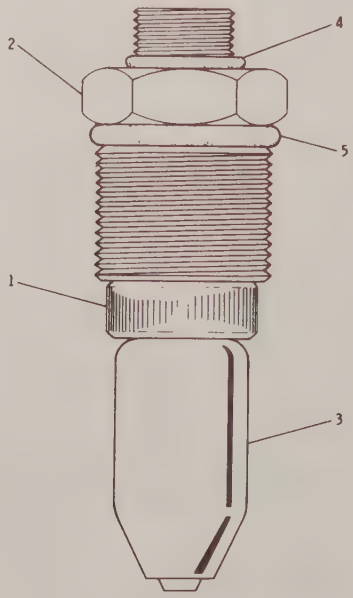


REF NO	PART NUMBER	DESCRIPTION	QTY
1	8N408	CONTROL ASSEM.	1
C 2	9G8010	SWITCH ASSEM. (Oil pressure-Use as required)	1

SEHS7367		FORM (Engine Data Sheet-2301 Electric Governors)	1

228239

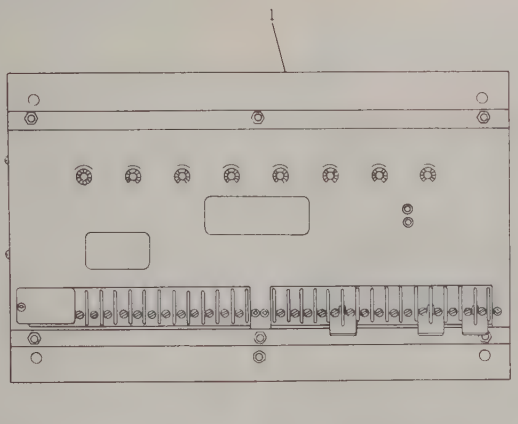
8N1731 GOVERNOR CONTROL GROUP—Standby



REF. NO.	PART NUMBER	DESCRIPTION	QTY
1	2N3946	VALVE ASSEM. (Each Includes)	6
	7M4603	BODY	1
2	5H7225	NUT	1
3	1P1098	VALVE SERVICE GROUP (Includes)	1
4	6F1069	SEAL ASSEM.	1
5	5B3718	SEAL	1

145589

4N5324 FUEL INJECTION VALVE GROUP
FOR USE WITH ELECTRIC WOODWARD GOVERNOR



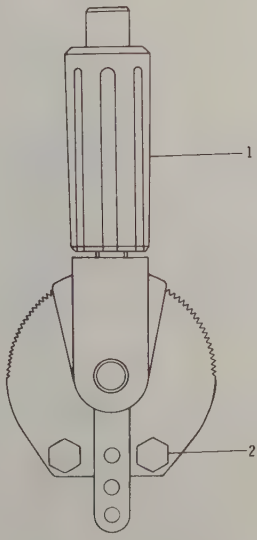
	REF NO	PART NUMBER	DESCRIPTION	QTY
	1	8N409	CONTROL ASSEM.	1
C	2	9G8010	SWITCH (Lube oil pressure-use as required)	1

C INDICATES CHANGE

SEHS7368		FORM (2301 Load Sharing and Speed Control)	1

228240

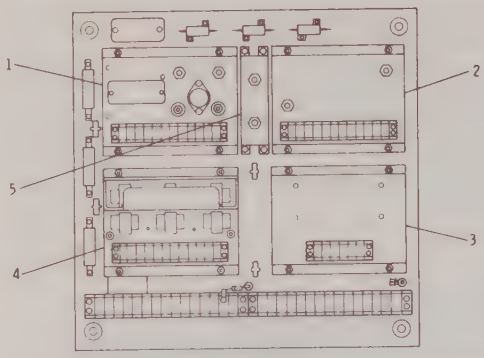
8N1730 GOVERNOR CONTROL GROUP—Load Sharing



REF NO.	PART NUMBER	DESCRIPTION	QTY
1	4N3828	CONTROL GROUP (Separate Illustration)	1
2	1B7182	BOLT	2
3	3B4505	LOCKWASHER	2
4	6D4972	SPACER	2

153819

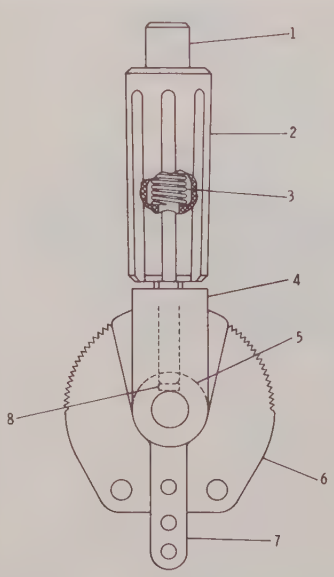
4N9846 GOVERNOR CONTROL GROUP—Remote and Positive Locking
Serial No. 46B5065—Up. FOR USE WITH HYDRO-MECHANICAL GOVERNOR
4N3828 Governor Control parts are shown on Page 128-4



REF NO	PART NUMBER	DESCRIPTION	QTY
1	6N1190	CONTROL ASSEM. ---(amplifer)----	1
2	6N1192	GENERATOR ASSEM. ---(ramp)-----	1
3	6N1191	SENSOR ASSEM. ----(speed)------	1
4	6N1194	SENSOR ASSEM. ----(load)-------	1
5	6N1193	BRACKET ASSEM. --(speed pot)----	1

148292

4N5358 GOVERNOR CONTROL GROUP—120-208 Volts—Load Sharing
Part of 4N5326 Governor Control Group shown on Page 128-1

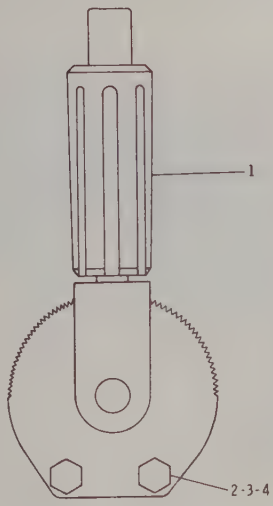


REF. NO.	PART NUMBER	DESCRIPTION	QTY
1	8L4279	SHAFT----------	1
2	4N4523	HANDLE ASSEM. ----------	1
3	7M1269	SPRING----------	1
4	4N4520	GUIDE----------	1
5	8L4282	HUB----------	1
C 6	6N775	RATCHET----------	1
7	4N4519	QUADRANT----------	1
8	5K605	PLUG----------	1

C INDICATES CHANGE

203168

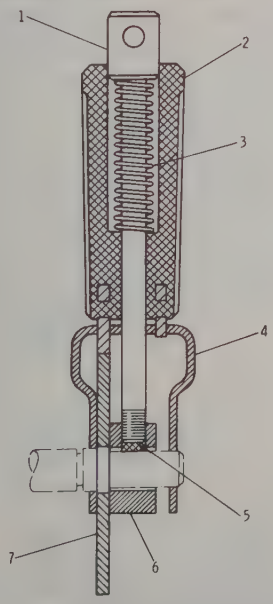
4N3828 GOVERNOR CONTROL GROUP—Remote and Positive Locking
Serial No. 46B5065—Up
Part of 4N9846 Governor Control Group shown on Page 128-3



REF NO	PART NUMBER	DESCRIPTION	QTY
1	4N3830	CONTROL GROUP (Separate Illustration)	1
2	1B7182	BOLT	2
3	3B4505	LOCKWASHER	2
4	6D4972	SPACER	1

153821

4N9848 GOVERNOR CONTROL GROUP—Positive Locking
Serial No. 46B5065—Up. FOR USE WITH HYDRO-MECHANICAL GOVERNOR
Only separate parts serviced

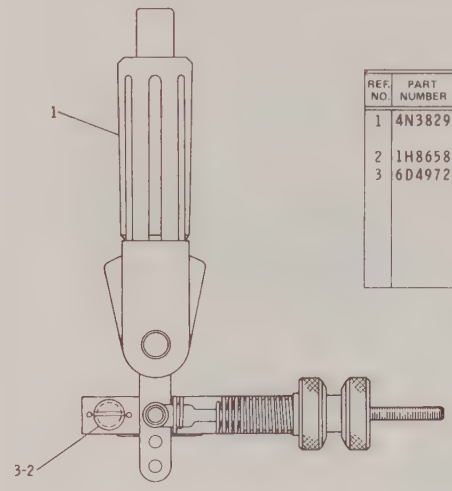


	REF. NO	PART NUMBER	DESCRIPTION	QTY
	1	8L4279	SHAFT	1
	2	4N4523	HANDLE ASSEM.	1
		4N9029	WASHER	1
	3	7M1269	SPRING	1
	4	4N4520	GUIDE	1
	5	5K605	PLUG	1
	6	8L4282	HUB	1
C	7	6N775	RATCHET	1

C INDICATES CHANGE

203171

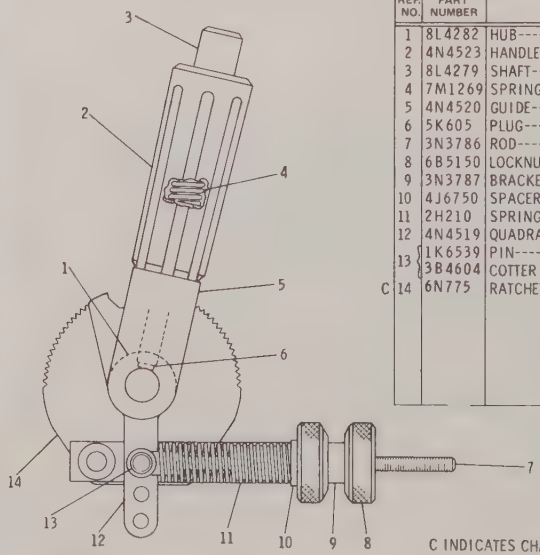
4N3830 GOVERNOR CONTROL GROUP—Positive Locking
Serial No. 46B5065—Up
Part of 4N9848 Governor Control Group



REF. NO.	PART NUMBER	DESCRIPTION	QTY
1	4N3829	CONTROL GROUP (Separate Illustration)	1
2	1H8658	MACHINE SCREW	2
3	6D4972	SPACER	2

153820

4N9847 GOVERNOR CONTROL GROUP—Vernier and Positive Locking
Serial No. 46B5065—Up. FOR USE WITH HYDRO-MECHANICAL GOVERNOR
Only separate parts serviced



REF. NO.	PART NUMBER	DESCRIPTION	QTY
1	8L4282	HUB	1
2	4N4523	HANDLE ASSEM.	1
3	8L4279	SHAFT	1
4	7M1269	SPRING	1
5	4N4520	GUIDE	1
6	5K605	PLUG	1
7	3N3786	ROD	1
8	6B5150	LOCKNUT	2
9	3N3787	BRACKET	1
10	4J6750	SPACER	1
11	2H210	SPRING	1
12	4N4519	QUADRANT	1
13	1K6539	PIN	1
	3B4604	COTTER PIN	1
C 14	6N775	RATCHET	1

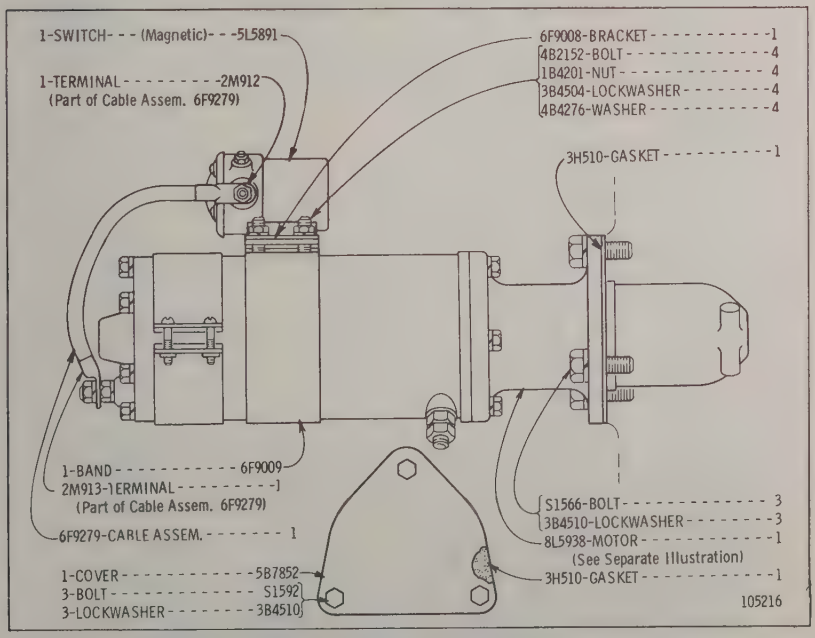
C INDICATES CHANGE

203170

4N3829 GOVERNOR CONTROL GROUP—Vernier and Positive Locking
Serial No. 46B5065—Up
Part of 4N9847 Governor Control Group

		Consists of:	Page
1	8L4244	Junction Box Group	128E
1	1N8292	Electric Starting Motor Group	128A
1	2N5802	Solenoid Shut-Off Group	129
1	2N5806	Contactor Group	128C
1	2N5892	Woodward Governor Group	128F
1	8L4849	Wiring Group	128B
1	.....	Print of Wiring Diagram	

7L5877 AUTOMATIC START-STOP ARRANGEMENT
Serial No. 46B2437—Up
Only separate parts serviced. When complete Arrangement is required order 3N877 listed on Page 128B



1N8292 ELECTRIC STARTING MOTOR GROUP—32 Volt
Part of 7L5877 Automatic Start-Stop Arrangement
8L5938 Motor parts are shown on Page 128D

		Consists of:	Page
1	8L4849	Wiring Group	128B
1	2N5802	Solenoid Shut-Off Group	129
1	2N5806	Contactor Group	128C
1	2N5892	Governor Group	128F
1	3N743	Electric Starting Motor Group	128C
1	3N857	Junction Box Group	128E
1	.....	Print of Wiring Diagram	
6	2N3946	Fuel Injection Valve Assembly	
		Consisting of:	
	1	5F2807 Cap	
	1	5H7225 Nut	
	1	7M4603 Body	
	1	1S2080 Nozzle Assembly	

3N877 AUTOMATIC START-STOP ARRANGEMENT—32 Volt
Serial No. 46B2437 to 46B5064 inclusive

		Consists of:	Page
1	5D5569	Connector--Sealing Grip	
6	1H5166	Clip (3.50" Long)	
1	2H2143	Marker (Card of)	
2	2H2965	Connector--Wire	
2	2L8049	Terminal (No. 10 Screw)	
1	2L8052	Terminal (3/8" Screw)	
2	2L8054	Terminal (1/2" Screw) (Used with No. 6 Wire)	
2	2L8065	Terminal (No. 8 Screw)	
3	2L8067	Terminal (1/4" Screw)	
2	2L8071	Terminal (1/2" Screw) (Used with No. 10 Wire)	
2	2L8074	Terminal (No. 6 Screw)	
21	2L8076	Terminal (No. 10 Screw)	
2	2L8079	Terminal (3/8" Screw) (Used with No. 14 Wire)	
6	2L9724	Clip (2.50" Long)	
2	5L2579	Grommet--Junction Box	
1	6L8150	Jumper--Terminal Strip	
75	8L8413	Tie (5.50" Long)	
2	5P1475	Terminal--Spring Spade (14-16 No. 8 Screw)	
2	5P1476	Terminal--Spring Spade (14-16 No. 10 Screw)	
2	5P1477	Terminal--Spring Spade (10-12 No. 8 Screw)	
2	5P1478	Terminal--Spring Spade (10-12 No. 10 Screw)	
6	3S2093	Tie (7.31" Long)	
	5P5675	Wire (No. 6)--2 M (5 Feet)	
	5P5622	Wire (No. 10)--2 M (6 Feet)	
	5P5624	Wire (No. 14)--11 M (35 Feet)	
1	1H4318	Grommet--Junction Box	

8L4849 WIRING GROUP
Part of 7L5877 Automatic Start-Stop Arrangement listed on Page 128A
FOR USE WITH ELECTRIC WOODWARD GOVERNOR
Refer to Automatic Start-Stop Chart shown on Page 128B-2 for usage

		Consists of:	Page
1	8L4849	Wiring Group	128B
1	2N5802	Solenoid Shut-Off Group	129
1	2N5806	Contactor Group	128C
1	3N743	Electric Starting Motor Group	128C
1	3N857	Junction Box Group	128E
1	6N111	Governor Group	128B-4
1	.....	Print of Wiring Diagram	
6	2N3946	Fuel Injection Valve Assembly	
		Consists of:	
	1 5F2807	Cap	
	1 5H7225	Nut	
	1 7M4603	Body	
	1 1S2080	Nozzle Assembly	

3N8054 AUTOMATIC START-STOP ARRANGEMENT—32 Volt
Serial No. 46B5065 to 46B6558 inclusive

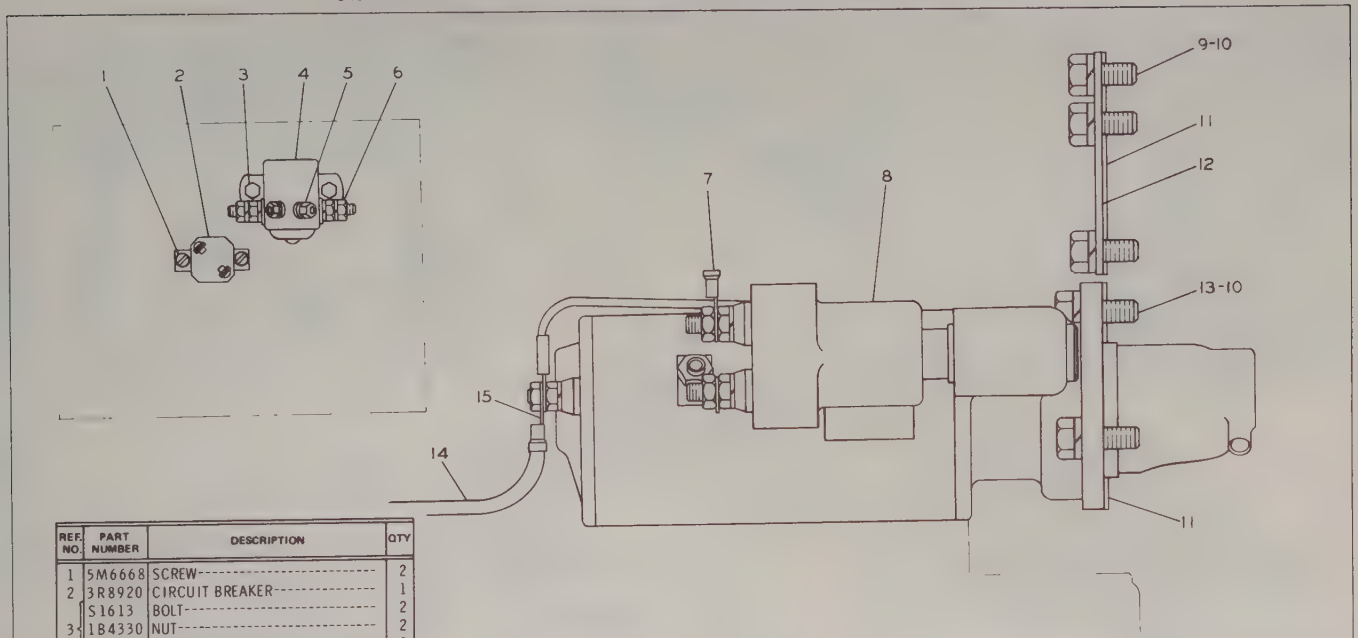
Part No.	Name	Usage Code* Governor	For Use With
3N744	Starting Motor Group	E	N-PGS-NG
		U	N-PGS-NG
8L4849	Wiring Group	E	N-PGS-NG
		U	N-PGS-NG
3N857	Junction Box Group	U	N-PGS-NG
6N160	Solenoid Shut-Off Group	U	N-PGS-NG
3N6526	Contactor Group	E	N-PGS-NG
3N8979	Contactor Group	U	N-PGS-NG
3N6529	Contactor Mounting Group	E	N-PGS-NG
		U	N-PGS-NG
3N9595	Contactor Group	E	N-PGS-NG
		U	N-PGS-NG
3N5866	Wiring Diagram	J	N-PGS-NG

* E -2301 Governor (Electrical)
U -UG8 Governor
N-PGS -Non-Package Generator Set
NG -No Generator Required

3N6600 AUTOMATIC START STOP CHART

3N744 ELECTRIC STARTING MOTOR GROUP—32 Volt

FOR USE WITH ELECTRIC WOODWARD GOVERNOR. 8L5939 Motor parts are shown on Pages 64D and 64E. REFER TO AUTOMATIC START-STOP CHART FOR USAGE



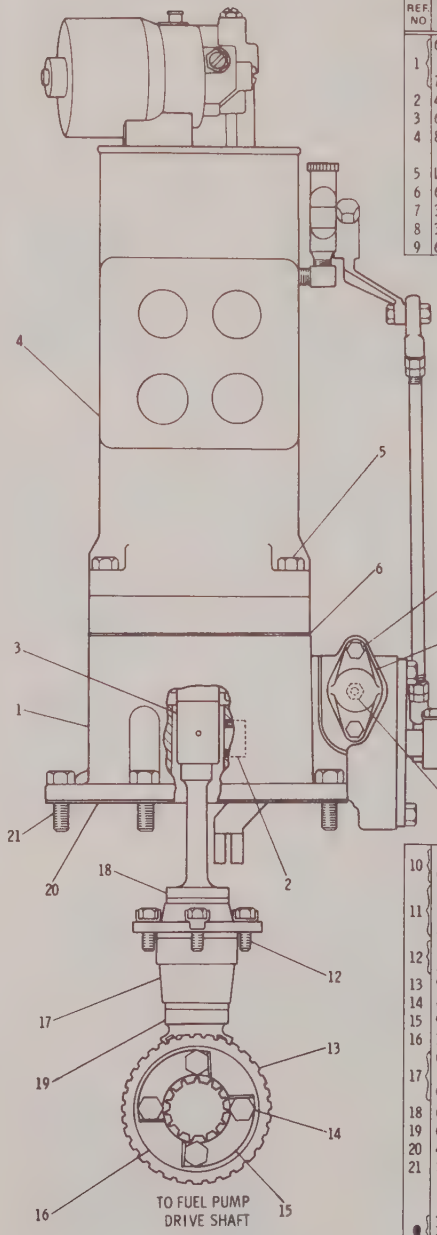
REF. NO.	PART NUMBER	DESCRIPTION	QTY
1	5M6668	SCREW	2
2	3R8920	CIRCUIT BREAKER	1
3	S1613	BOLT	2
	1B4330	NUT	2
	3B4504	LOCKWASHER	2
4	9F3099	SWITCH-(Magnetic)	2
5	4B2043	NUT	2
	3B4501	LOCKWASHER	2
6	4F2294	NUT	2
	3L6789	LOCKWASHER	2
	8F908	WASHER	2

7	2L8052	TERMINAL	1
8	8L5939	MOTOR ASSEM. (Separate Illustration)	1
9	4B4043	BOLT	3
10	3B4510	LOCKWASHER	6

11	3H510	GASKET		2
12	3H761	COVER		1
13	S1589	BOLT		3
▲ 14	4S8784	WIRE	12"	
15	2L8054	TERMINAL		1

▲ ORDER BY THE FOOT

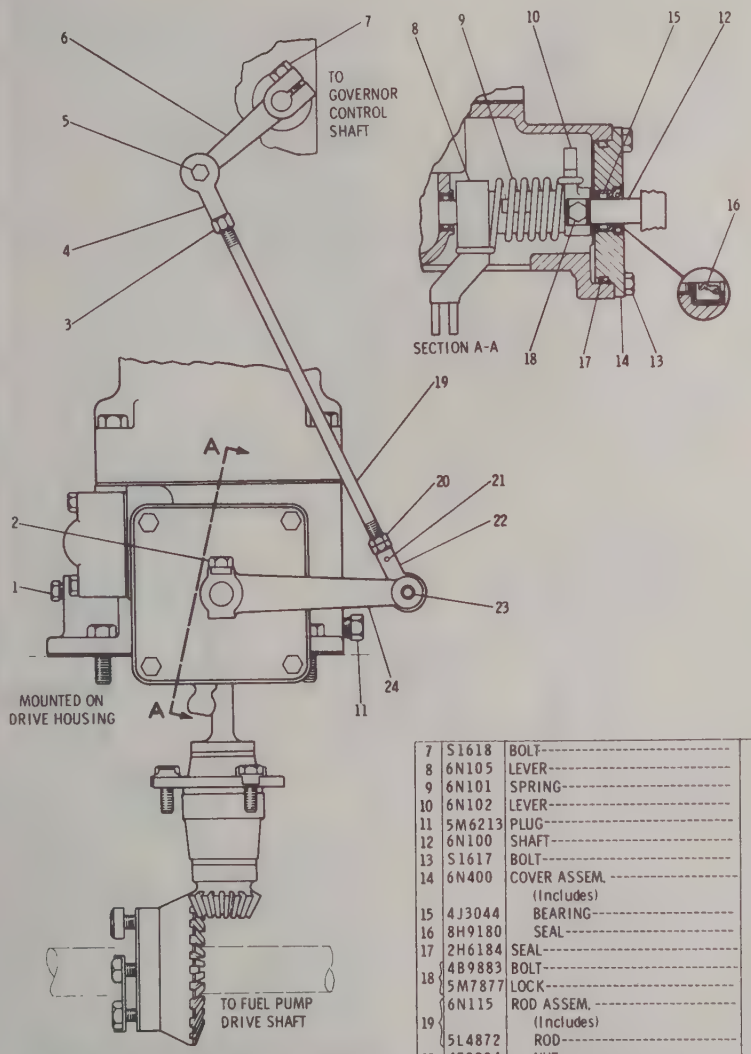
144551



REF. NO	PART NUMBER	DESCRIPTION	QTY
1	6N110	HOUSING ASSEM. (Includes)	1
	7H3639	PIN	1
2	4J3044	BEARING	1
3	6N159	COUPLING	1
4	8L8919	GOVERNOR GROUP (Separate Illustration)	1
5	L2070	BOLT	2
6	6L3401	GASKET	1
7	3L3911	SWITCH	1
8	3L4576	NAMEPLATE	1
9	6L1756	BOLT	2
10	1N7190	COVER	1
	6L3458	GASKET	1
	8L5959	SCREW	1
11	2L1331	NUT	1
	2L1333	LOCK	1
12	S1617	BOLT	3
	2A5328	LOCK	3
13	9F1475	GEAR-(35 teeth)	1
14	4B6697	BOLT	4
15	9F1490	LOCK	2
16	3H2417	SHIM	1
17	6N109	PINION ASSEM. (Includes)	1
	9M1704	CAGE ASSEM.	1
18	6H3492	WASHER	1
19	6N108	PINION	1
20	4N5196	GASKET	1
21	S1594	BOLT	6
•	3L9429	WIRING DIAGRAM	1
	3L5682	MARKER-(card of)	1

153066

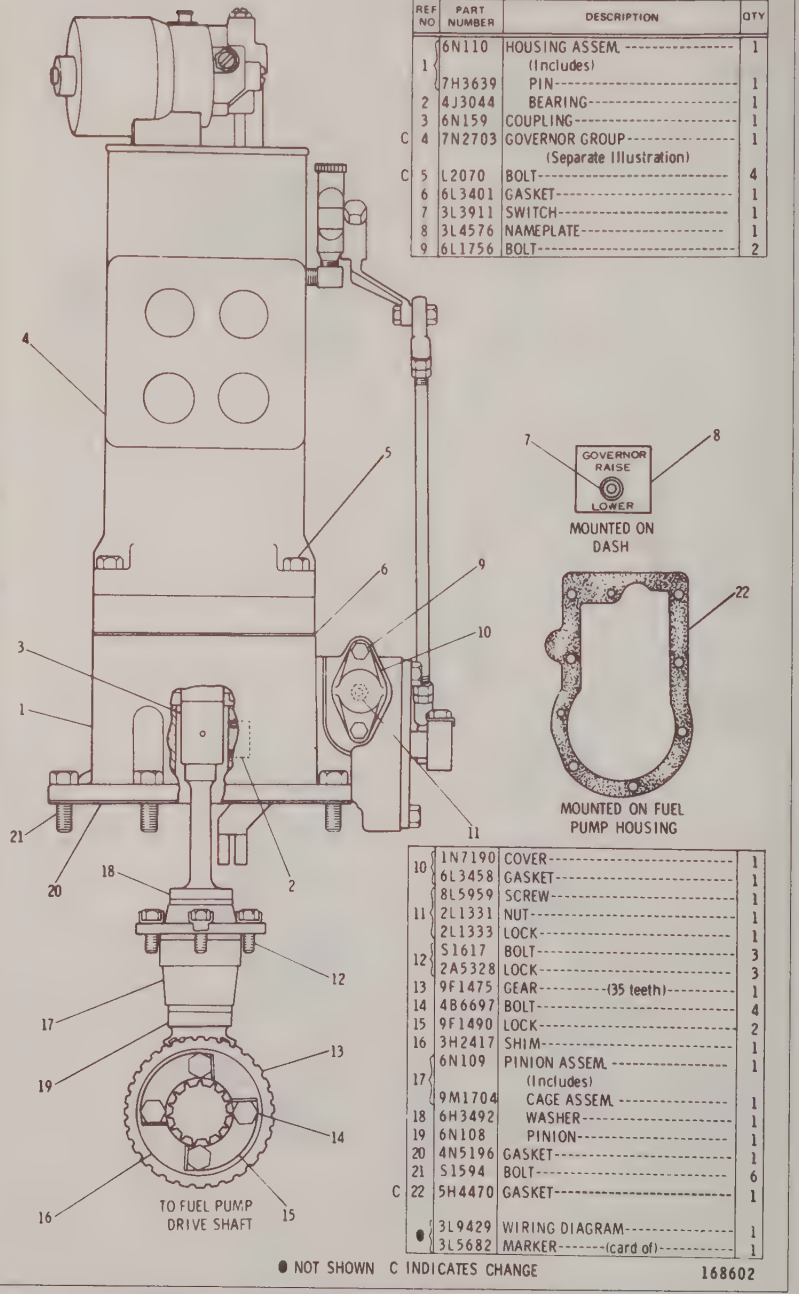
6N111 WOODWARD GOVERNOR GROUP—Part 1—Type 1
Serial No. 46B5065 to 46B6558 inclusive. Also part of 7N4434 Engine Arrangement and 3N8054 Automotive Start-Stop Arrangement listed on Pages 13A and 128B-1
8L8919 Governor parts are shown on Page 128H



REF. NO	PART NUMBER	DESCRIPTION	QTY
1	5M6214	PLUG	1
2	1A2343	BOLT	1
	5M7877	LOCK	1
3	4F2294	NUT	1
4	7L4186	ROD END	1
5	S1616	BOLT	1
	4L6458	NUT	1
6	1F3923	LEVER	1
7	S1618	BOLT	1
8	6N105	LEVER	1
9	6N101	SPRING	1
10	6N102	LEVER	1
11	5M6213	PLUG	1
12	6N100	SHAFT	1
13	S1617	BOLT	4
14	6N400	COVER ASSEM. (Includes)	1
15	4J3044	BEARING	1
16	8H9180	SEAL	1
17	2H6184	SEAL	1
18	4B9883	BOLT	1
	5M7877	LOCK	1
19	6N115	ROD ASSEM. (Includes)	1
	5L4872	ROD	1
20	4F2294	NUT	1
21	7H3639	PIN	1
22	7L4186	ROD END	1
23	2B2695	BOLT	1
24	8L5258	LEVER	1

155720

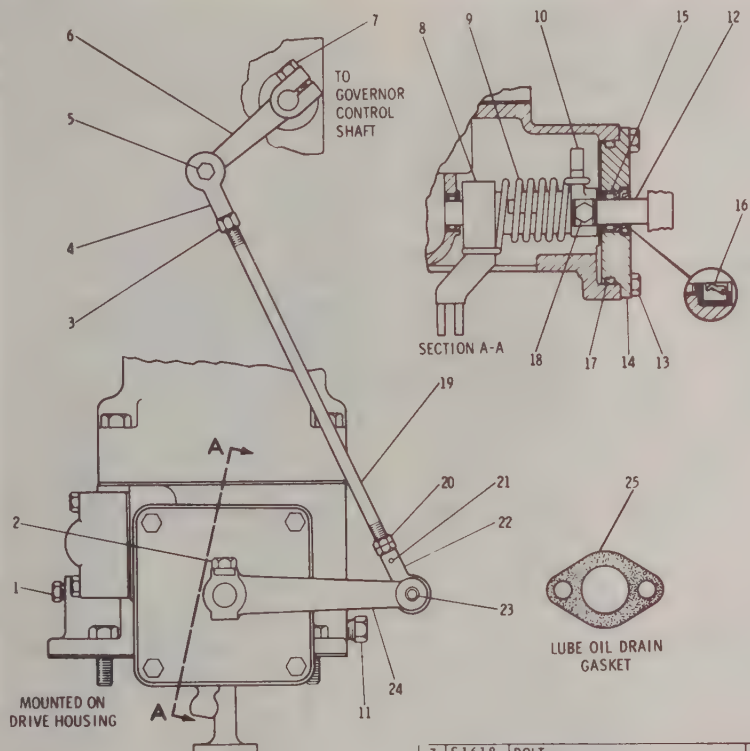
6N111 WOODWARD GOVERNOR GROUP—Part 2—Type 1
Serial No. 46B5065 to 46B6558 inclusive. Also part of 7N4434 Engine Arrangement and 3N8054 Automatic Start-Stop Arrangement listed on Pages 13A and 128B-1



REF NO	PART NUMBER	DESCRIPTION	QTY
1	6N110	HOUSING ASSEM. (Includes)	1
	7H3639	PIN	1
2	4J3044	BEARING	1
3	6N159	COUPLING	1
C 4	7N2703	GOVERNOR GROUP (Separate Illustration)	1
C 5	L2070	BOLT	4
6	6L3401	GASKET	1
7	3L3911	SWITCH	1
8	3L4576	NAMEPLATE	1
9	6L1756	BOLT	2
10	1N7190	COVER	1
	6L3458	GASKET	1
	8L5959	SCREW	1
11	2L1331	NUT	1
	2L1333	LOCK	1
12	S1617	BOLT	3
	2A5328	LOCK	3
13	9F1475	GEAR (35 teeth)	1
14	4B6697	BOLT	4
15	9F1490	LOCK	2
16	3H2417	SHIM	1
17	6N109	PINION ASSEM. (Includes)	1
	9M1704	CAGE ASSEM.	1
18	6H3492	WASHER	1
19	6N108	PINION	1
20	4N5196	GASKET	1
21	S1594	BOLT	6
C 22	5H4470	GASKET	1
●	3L9429	WIRING DIAGRAM	1
●	3L5682	MARKER (card of)	1

● NOT SHOWN C INDICATES CHANGE 168602

6N111 WOODWARD GOVERNOR GROUP—Part 1—Type 2
Serial No. 46B5065 to 46B6558 inclusive. Also part of 7N4434 Engine Arrangement and 3N8054 Automatic Start-Stop Arrangement listed on Pages 13A and 128B-1
7N2703 Governor parts are shown on Page 128B-8

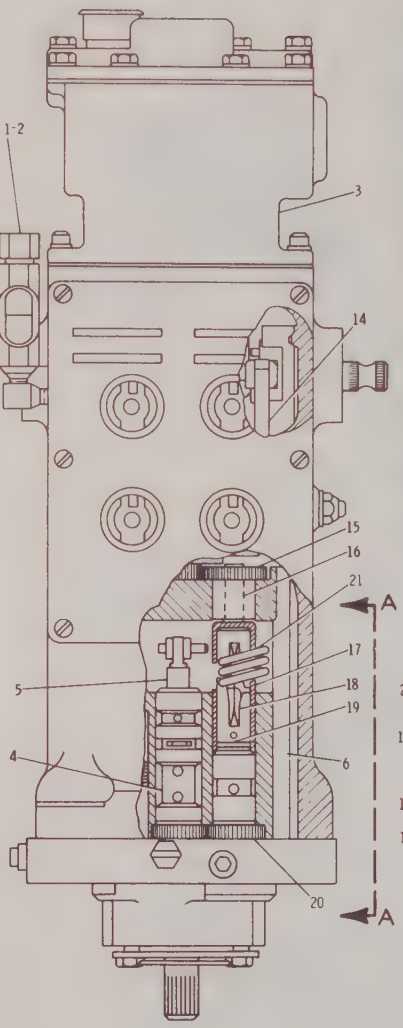


REF NO	PART NUMBER	DESCRIPTION	QTY
1	5M6214	PLUG	1
2	1A2343	BOLT	1
	5M7877	LOCK	1
3	4F2294	NUT	1
4	7L4186	ROD END	1
5	S1616	BOLT	1
	4L6458	NUT	1
6	1F3923	LEVER	1

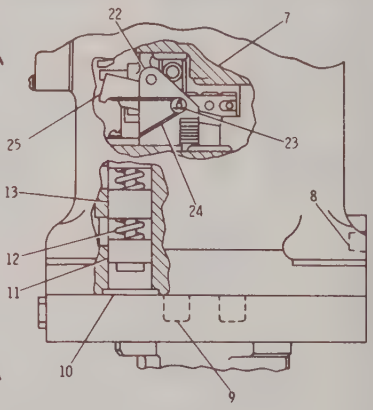
	7	S1618	BOLT	1
	8	6N105	LEVER	1
C	9	6N8134	SPRING	1
	10	6N102	LEVER	1
	11	5M6213	PLUG	1
	12	6N100	SHAFT	1
	13	S1617	BOLT	4
	14	6N400	COVER ASSEM. (Includes)	1
	15	4J3044	BEARING	1
	16	8H9180	SEAL	1
	17	2H6184	SEAL	1
	18	4B9883	BOLT	1
		5M7877	LOCK	1
	19	6N115	ROD ASSEM. (Includes)	1
		5L4872	ROD	1
	20	4F2294	NUT	1
	21	7H3639	PIN	1
C	22	5P6672	ROD END	1
	23	2B2695	BOLT	1
	24	8L5258	LEVER	1
C	25	5H5770	GASKET	1
C	26	8H7211	LOCK	2

C INDICATES CHANGE 168603

6N111 WOODWARD GOVERNOR GROUP—Part 2—Type 2
Serial No. 46B5065 to 46B6558 inclusive. Also part of 7N4434 Engine Arrangement and 3N8054 Automatic Start-Stop Arrangement listed on Pages 13A and 128B-1



6	6L4304	CONTROLET ASSEM. (Includes)	1
	3L6745	CONTROLET ASSEM. (Includes)	1
7	8F9914	CONTROLET	1
	9F9635	WASHER	2
8	9F2247	PLUG	4
9	2F6707	VALVE ASSEM.	2
10	9F9630	RING	4
11	2F6818	PISTON	2
12	2V6802	SPRING	2
13	3L6746	SEAT	1
14	3H8076	PISTON ASSEM.	1
15	9F9597	GEAR--------(17 teeth)--------	1
16	9F9596	DRIVE ASSEM. (Includes)	1
	9F9599	DRIVE ASSEM.	1
17	6L5602	SLEEVE ASSEM.	1
18	2F6700	LAMINATION	12
19	3K4897	PIN	1
20	9F9598	GEAR ASSEM.	1
21	6L5417	SPRING	1
22	5H6500	LEVER ASSEM. (Includes)	1
	2N1922	PIN	1
23	2F6713	COTTER PIN	1
	4F2317	WASHER	1
24	7L8458	SPRING	1
25	5H6503	LEVER	1

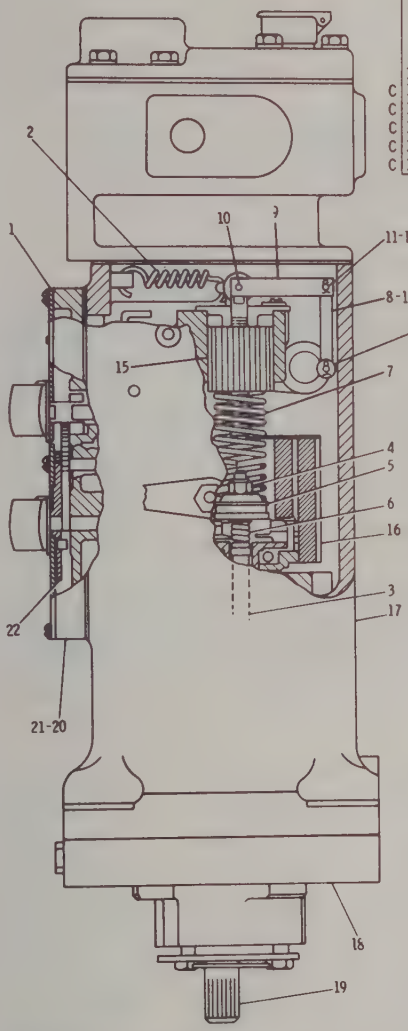


VIEW A-A

REF. NO.	PART NUMBER	DESCRIPTION	QTY
1	7N8444	GAUGE---------(oil level)---------	1
2	3L2402	FITTING	1
3	7N8325	COVER ASSEM.	1
4	9F9626	BUSHING	1
5	2F6814	PLUNGER	1

168604

7N2703 WOODWARD GOVERNOR GROUP—Part 1
Serial No. 46B5065 to 46B7773 inclusive. Part of 7N4374 Engine Arrangement and 6N111 Woodward Governor Group shown on Pages 13A, 13B, 128B-4, 128B-5, 128B-6 and 128B-7



7	3N3366	SPRING ASSEM.	1
8	3L7235	SCREW ASSEM.	1
		(Includes)	
9	2F6693	LEVER	1
10	2F6691	PIN	1
C 11	2F6763	PIN	1
C 12	2F6713	COTTER	3
C 13	2F6738	LINK	1
C 14	2F6746	WASHER	1
C 15	9F9706	GEAR	1

REF. NO.	PART NUMBER	DESCRIPTION	QTY
1	3L6778	PLATE	1
2	2F6761	SPRING	1
3	5H6475	ROD ASSEM.	1
		(Includes)	
	5H6476	ROD & PIN ASSEM.	1
4	7N7578	LOCKNUT	1
5	2F6686	BEARING	1
6	2F6689	SPRING	1

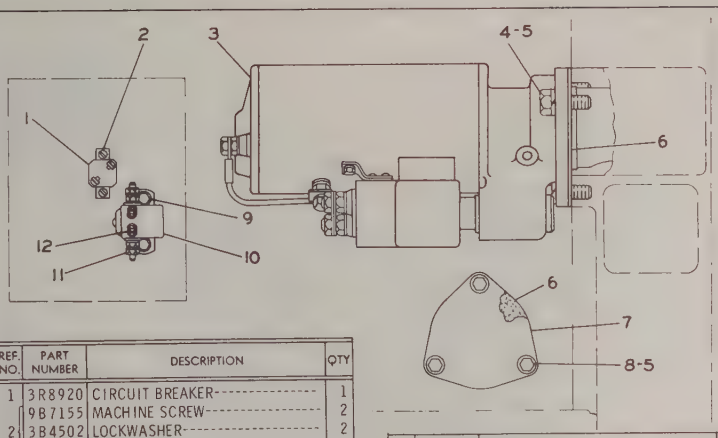
16	2N3685	BALLHEAD ASSEM.	1
17	7N6287	CASE ASSEM.	1
18	6L4249	BASE ASSEM.	1
		(Includes)	
19	2F6674	SHAFT	1
20	6L4252	PANEL ASSEM.	1
		(Includes)	
21	2F6766	GEAR ASSEM.	1
22	7N9119	GEAR ASSEM.	1

THE FOLLOWING REPAIR KITS ARE AVAILABLE:

	6L3629	KIT-(hardware)	1
		(Includes pointers, pins, rings, laminations, washers, nuts, "O" rings, lockwashers, seals cotter pins, lockwire & screws)	
	7N9121	KIT-(gasket)	1
C	6L4229	KIT-(repair)	1
		(Includes valve assemblies, pins, plugs, bearings, springs, studs, cover assembly, pistons, knobs, ring, sets screws, washer and seat)	

C INDICATES CHANGE 169040

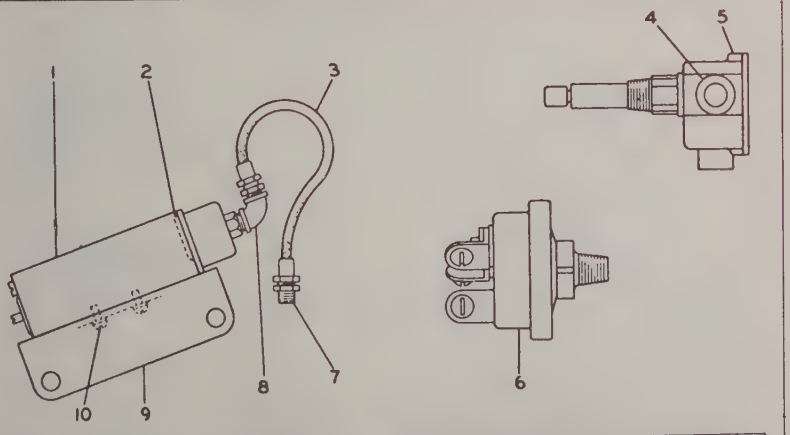
7N2703 WOODWARD GOVERNOR GROUP—Part 2
Serial No. 46B5065 to 46B7773 inclusive
Part of 7N4374 Engine Arrangement and 6N111 Woodward Governor Group shown on Pages 13A, 13B, 128B-4, 128B-5, 128B-6 and 128B-7



REF. NO.	PART NUMBER	DESCRIPTION	QTY
1	3R8920	CIRCUIT BREAKER	1
	9B7155	MACHINE SCREW	2
2	3B4502	LOCKWASHER	2
	4B2047	NUT	2
3	8L5939	MOTOR ASSEM. (See Separate Illustration)	1
4	S1566	BOLT	3
5	3B4510	LOCKWASHER	6
6	3H510	GASKET	2
7	3H761	COVER	1
8	S1592	BOLT (Starter Opening in Flywheel Hsg.)	3
	S1613	BOLT	2
9	1B4330	NUT	2
	3B4504	LOCKWASHER	2
10	9F3099	SWITCH	1
	4F2294	NUT	2
11	3L6789	LOCKWASHER	2
	8F908	WASHER	2
12	4B2043	NUT	2
	3B4501	LOCKWASHER	2

136650

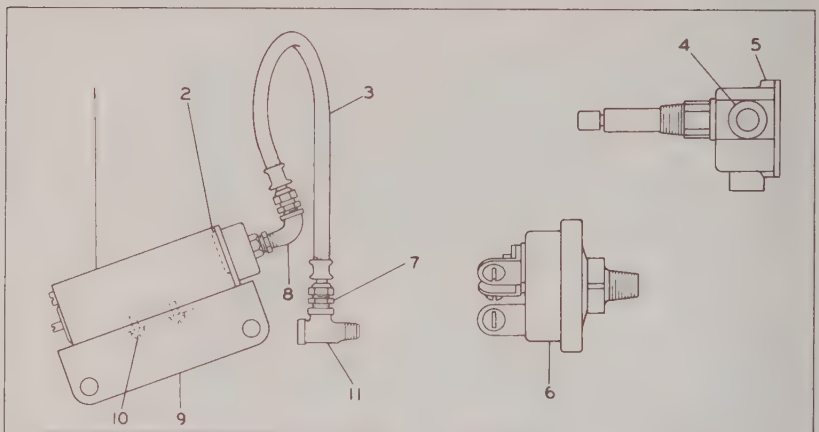
3N743 ELECTRIC STARTING MOTOR GROUP—32 Volt
FOR USE WITH ELECTRIC WOODWARD GOVERNOR. Part of 3N877 Automatic Start-Stop Arrangement listed on Page 128B. 8L5939 Motor parts are shown on Pages 64D and 64E. Only separate parts serviced. When complete Group is required order 3N744 shown on Page 128B-3



REF. NO.	PART NUMBER	DESCRIPTION	QTY
1	6L2134	CONTACTOR (Oil Pressure)	1
2	3F1240	GROMMET	1
3	4H3634	HOSE ASSEM. (7.687" Long Overall)	1
4	4F8184	BUSHING	1
5	5L6435	CONTACTOR (Water Pressure)	1
6	5L5500	SWITCH	1
7	3B6768	BUSHING	2
8	3B7729	ELBOW	1
9	2L7884	BRACKET	1
10	4B1237	SCREW	2
	3B4502	LOCKWASHER	2

129462

2N5806 CONTACTOR GROUP
Part of 7L5877 and 3N877 Automatic Start-Stop Arrangements listed on Pages 128A and 128B. Only separate parts serviced. When complete Group is required order 3N6529 and 3N8979 shown on Page 128C-2

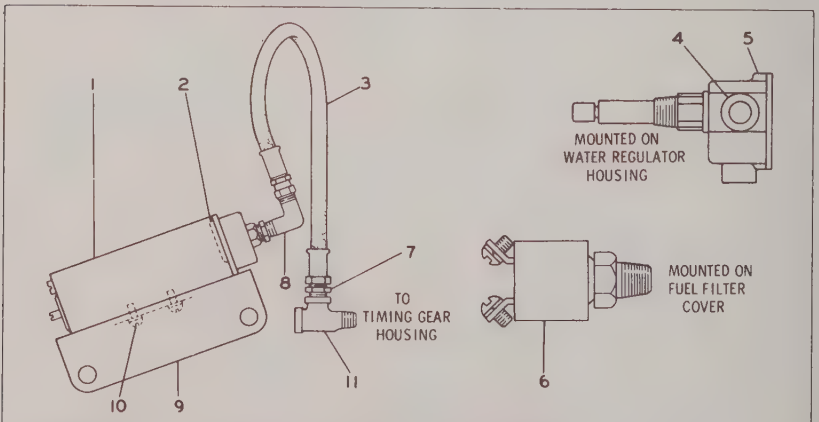


REF NO	PART NUMBER	DESCRIPTION	QTY
1	6L2134	CONTACTOR-----(Oil Pressure)----	1
2	3F1240	GROMMET----------	1
C 3	7M9222	HOSE ASSEM. ---(14 in. Long)-----	1
4	4F8184	BUSHING--- ----------	1
5	5L6435	CONTACTOR--(Water Pressure)----	1
6	5L5500	SWITCH---------- ---	1
7	3B6768	BUSHING ----------	3
8	3B8822	ELBOW----------	1
9	2L7884	BRACKET----------	1
10	4B1237	SCREW----------	2
	3B4502	LOCKWASHER----------	2
11	1F1651	TEE----------	1

C INDICATES CHANGE 143051

2N5806 CONTACTOR GROUP—Type 2

Part of 7L5877 and 3N877 Automatic Start-Stop Arrangements listed on Pages 128A and 128B. Only separate parts serviced. When complete Group is required order 3N6529 and 3N8979 shown on Page 128C-2

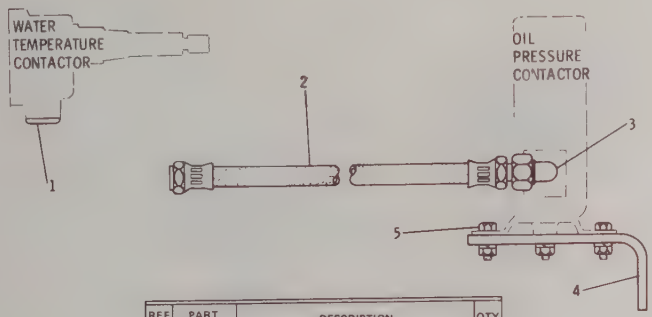


REF NO	PART NUMBER	DESCRIPTION	QTY
1	6L2134	CONTACTOR------(oil pressure)---	1
2	3F1240	GROMMET----------	1
C 3	3N4579	HOSE ASSEM. ---14 in. (3.56 dm)	1
4	4F8184	BUSHING----------	1
5	5L6435	CONTACTOR----(water pressure)--	1
C 6	2N7744	SWITCH-----(fuel pressure)-------	1
C 7	3B6768	BUSHING ----------	3
C 8	2N1287	ELBOW----------	1
9	2L7884	BRACKET----------	1
10	4B1237	SCREW----------	2
	3B4502	LOCKWASHER----------	2
11	1F1651	TEE----------	1

C INDICATES CHANGE 154398

2N5806 CONTACTOR GROUP—Type 3

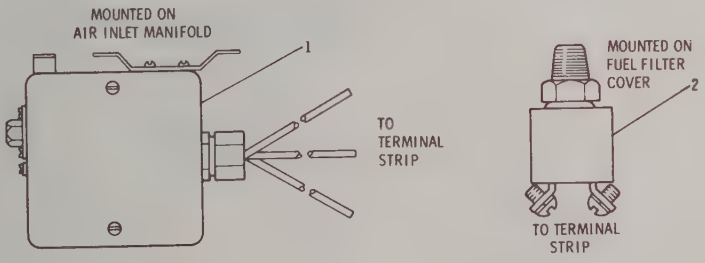
Part of 7L5877 and 3N877 Automatic Start-Stop Arrangements listed on Pages 128A and 128B. Only separate parts serviced. When complete Group is required order 3N6529 and 3N8979 shown on Page 128C-2

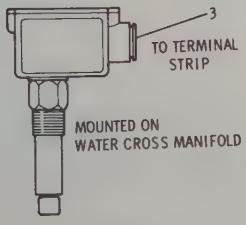


REF. NO	PART NUMBER	DESCRIPTION	QTY
1	4F8184	BUSHING	1
2	3H3380	HOSE ASSEM. ----(8.25 in. long)--	1
3	3B9406	FITTING	1
4	2L7884	BRACKET	1
5	2A762	BOLT	3
	1B4330	NUT	3
	3B4504	LOCKWASHER	3

144389

3N6529 CONTACTOR MOUNTING GROUP
Serial No. 46B2437—Up. FOR USE WITH ELECTRIC WOODWARD GOVERNOR
REFER TO AUTOMATIC START-STOP CHART SHOWN ON PAGE 128B-2
FOR USAGE

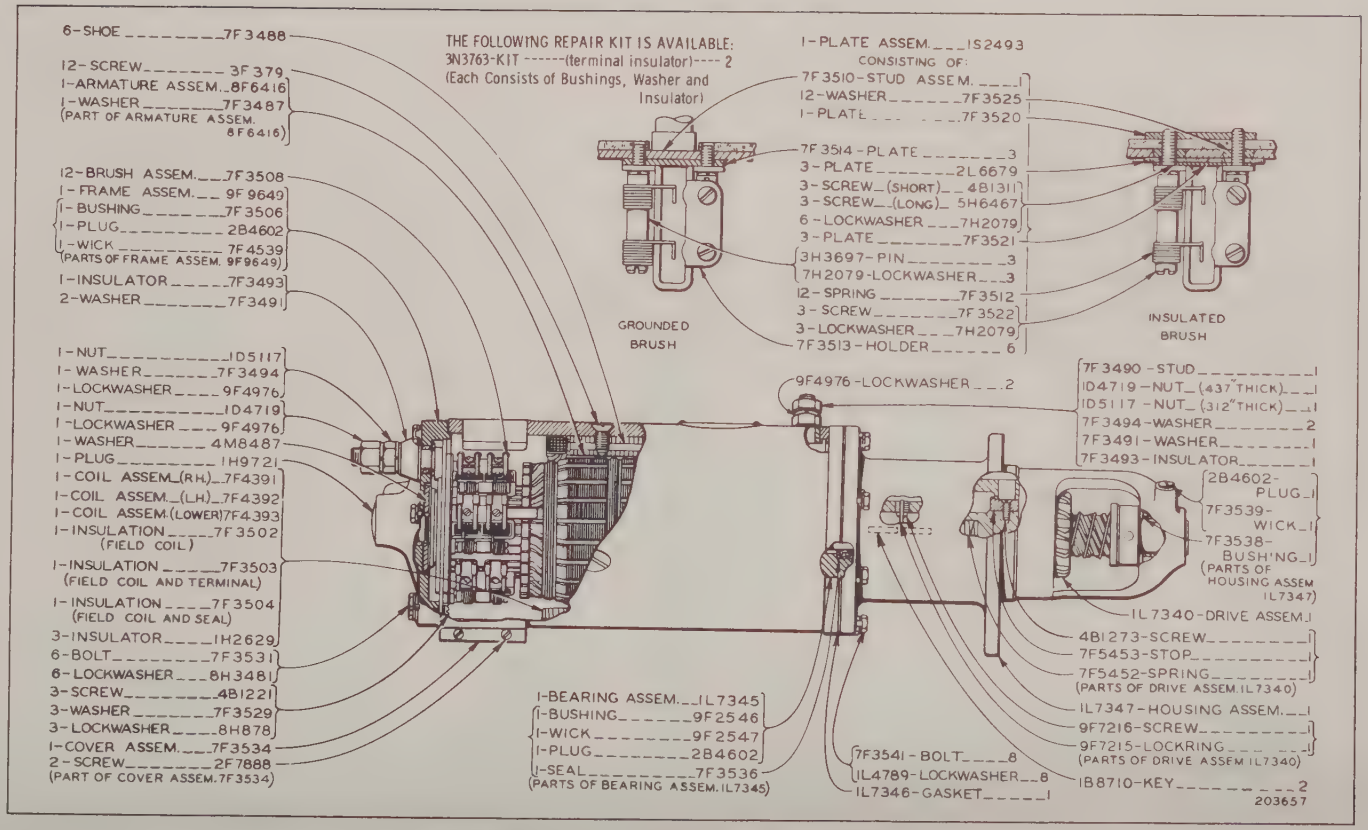




REF. NO.	PART NUMBER	DESCRIPTION	QTY
1	2N7124	SWITCH------(oil pressure)------	1
2	2N7744	SWITCH------(fuel pressure)------	1
3	5L6435	CONTACTOR----(water temp.)-----	1

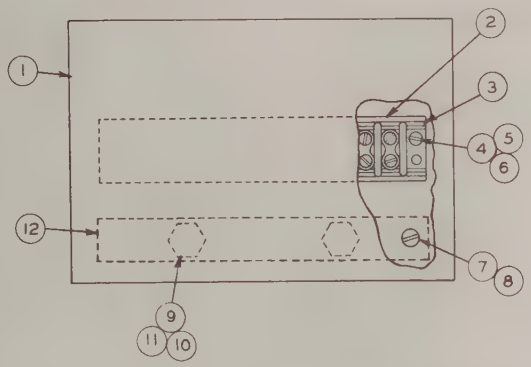
153919

3N8979 CONTACTOR GROUP
REFER TO AUTOMATIC START-STOP CHART SHOWN ON PAGE
128B-2 FOR USAGE



8L5938 ELECTRIC STARTING MOTOR ASSEMBLY

Part of 5L6691 & 1N8292 Electric Starting Motor Group shown on Pages 70A & 128A

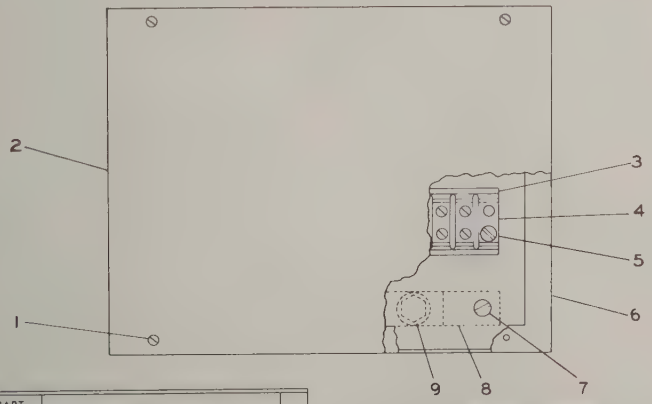


REF. NO.	PART NUMBER	DESCRIPTION	QTY
1	8L4236	BOX	1
2	4L6471	STRIP (Marker)	1
3	4L6470	STRIP	1
4	4B1308	BOLT	2
5	4B2047	NUT	2
6	3B4502	LOCKWASHER	2

REF. NO.	PART NUMBER	DESCRIPTION	QTY
7	9B9178	SCREW	2
8	3B4504	LOCKWASHER	2
9	S1588	BOLT	2
	3H2137	SPACER	2
10	3B4506	LOCKWASHER	2
11	4B5271	WASHER	2
12	8L4242	STRAP	1

105213

8L4244 JUNCTION BOX GROUP
Part of 7L5877 Automatic Start-Stop Arrangement listed on Page 128A



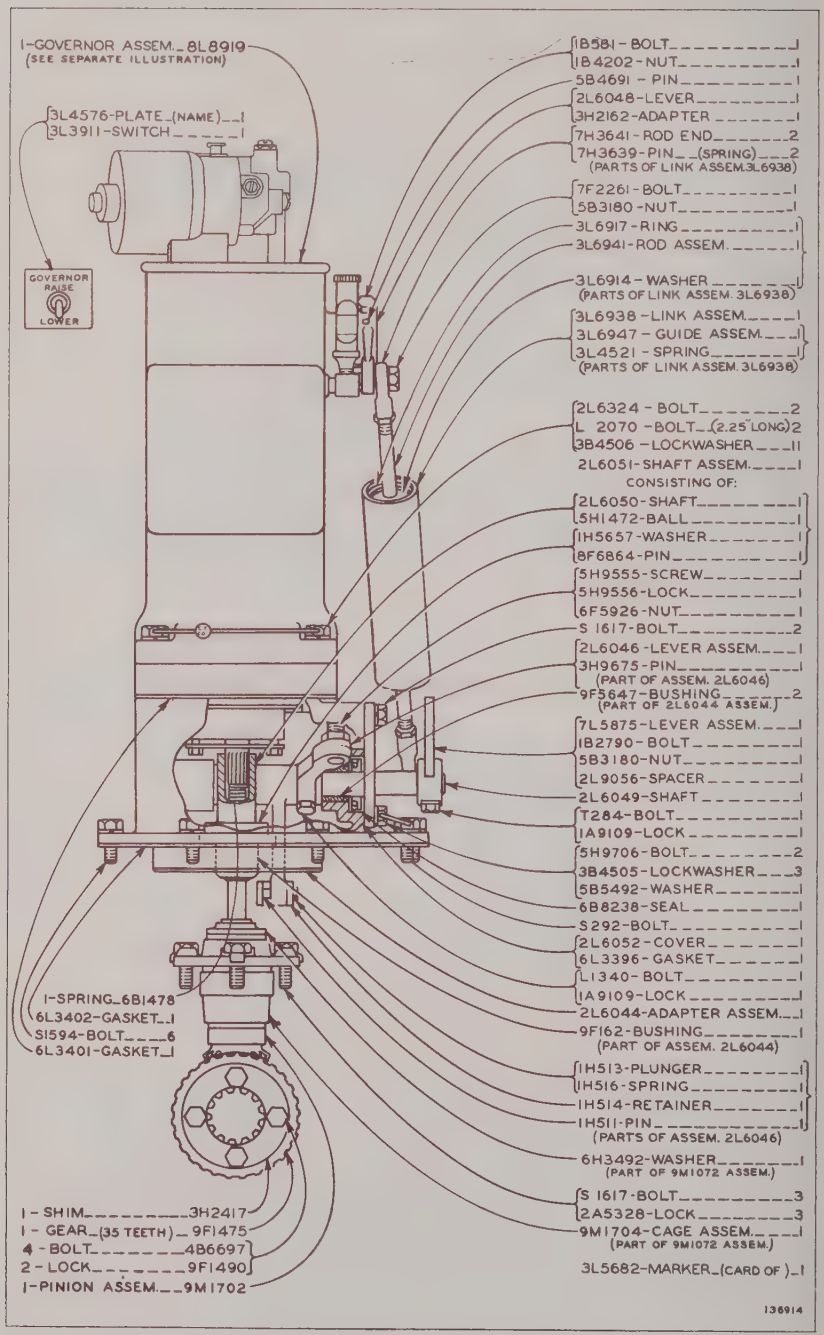
	REF. NO.	PART NUMBER	DESCRIPTION	QTY
C	1	9M5520	SCREW	4
	2	3N855	COVER	1
	3	5L8546	STRIP	1
	4	4D1260	STRIP	1
	5	9B7155	SCREW	2
		4B2047	NUT	2
		3B4502	LOCKWASHER	2

REF. NO.	PART NUMBER	DESCRIPTION	QTY
6	3N854	BOX	1
7	4B1318	SCREW	2
	3B4504	LOCKWASHER	2
8	8L4242	STRAP	1
9	S1588	BOLT	2
	3B4506	LOCKWASHER	2
	4B5271	WASHER	2
	3H2137	SPACER	2

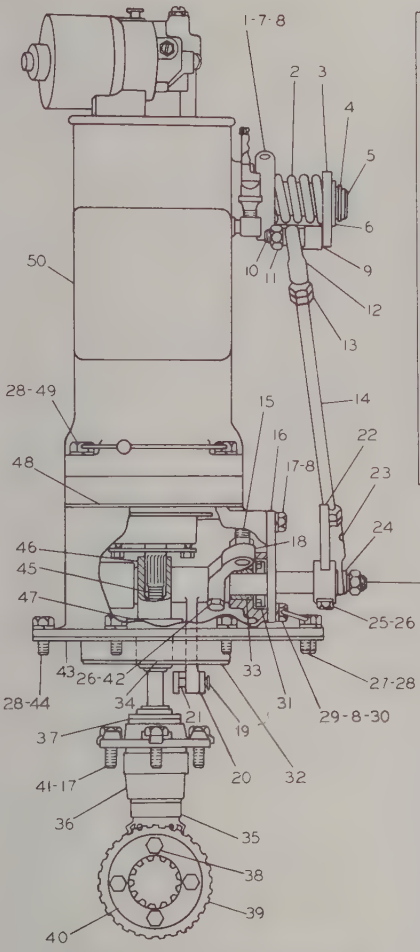
C INDICATES CHANGE

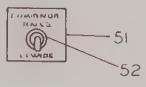
206952

3N857 JUNCTION BOX GROUP
Part of 3N877 Automatic Start-Stop Arrangement listed on Page 128B. REFER TO AUTOMATIC START-STOP CHART SHOWN ON PAGE 128B-2 FOR USAGE



2N5892 WOODWARD GOVERNOR GROUP—Type 1
Part of 7L5877 and 3N877 Automatic Start-Stop Arrangements and 8L4474 Governor Arrangement listed on Pages 128, 128B and 136B. 8L8919 Governor parts are shown on Page 128H



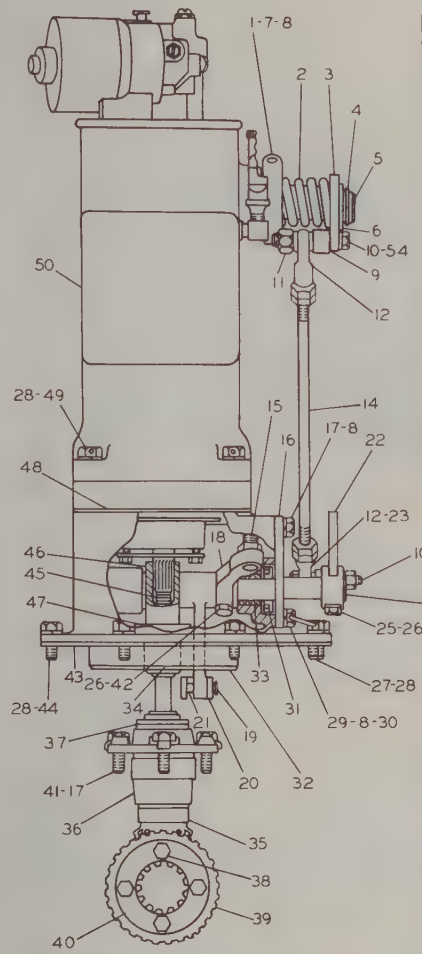


REF NO	PART NUMBER	DESCRIPTION	QTY
1	4N3993	LEVER ASSEM.	1
	2N7353	CLAMP	1
2	2N6345	SPRING	1
C 3	4N6916	LEVER	1
4	8F4610	RING	1
5	2N6341	PIN	1
6	1K502	WASHER	1
7	4B3388	BOLT	2
8	3B4505	LOCKWASHER	4
9	2S2301	SPACER	1
10	1B9575	BOLT	1
	4B4277	WASHER	1
11	2R504	NUT	2
12	7H3641	ROD END	2
13	4F2294	NUT	2
14	7H3640	ROD	1
15	5H9555	SCREW	1
	5H9556	LOCK	1
	6F5926	NUT	1
16	2L6052	COVER	1
	6L3396	GASKET	1
17	S1617	BOLT	5
18	2L6046	LEVER ASSEM.	1
	3H9675	PIN	1
19	1H513	PLUNGER	1
	1H516	SPRING	1
20	1H514	RETAINER	1
21	1H511	PIN	1
22	7L5875	LEVER ASSEM.	1
23	7H3639	PIN	1
24	2L6049	SHAFT	1
25	T284	BOLT	1
26	1A9109	LOCK	2
27	S292	BOLT	1
28	3B4506	LOCKWASHER	11
29	5H9706	BOLT	2
30	5B5492	WASHER	1
31	6B8238	SEAL	1
32	2L6044	ADAPTER ASSEM.	1
33	9F5647	BUSHING	2
34	9F162	BUSHING	1
35	9M1702	PINION ASSEM.	1
36	9M1704	CAGE ASSEM.	1
37	6H3492	WASHER	1
38	4B6697	BOLT	4
	9F1490	LOCKWASHER	2
39	9F1475	GEAR-(35 teeth)	1
40	3H2417	SHIM	1
41	2A5328	LOCK	3
42	L1340	BOLT	1
43	6L3402	GASKET	1
44	S1594	BOLT	6
45	6B1478	SPRING	1
46	2L6051	SHAFT ASSEM.	1
	2L6050	SHAFT	1
	5H1472	BALL	1
47	1H5657	WASHER	1
	8F6864	PIN	1
48	6L3401	GASKET	1
49	2L6324	BOLT	2
	L2070	BOLT-(2.25" Long)	2
50	8L8919	GOVERNOR ASSEM. (Separate Illustration)	1
51	3L4576	PLATE-(Name)	1
52	3L3911	SWITCH	1
53	3L9429	WIRING DIAGRAM	1
	3L5682	MARKER-(Card of)	1

C INDICATES CHANGE 144171

2N5892 WOODWARD GOVERNOR GROUP—Type 2

Part of 7L5877 and 3N877 Automatic Start-Stop Arrangements and 8L4474 Governor Arrangement listed on Pages 128A, 128B and 136B. 8L8919 Governor parts are shown on Page 128H



11	2R504	NUT	2
12	7H3641	ROD END	2
13	4F2294	NUT	2
14	7H3640	ROD	1
15	5H9555	SCREW	1
	5H9556	LOCK	1
	6F5926	NUT	1
16	2L6052	COVER	1
	6L3396	GASKET	1
17	S1617	BOLT	5
18	2L6046	LEVER ASSEM.	1
	3H9675	PIN	1
19	1H513	PLUNGER	1
	1H516	SPRING	1
20	1H514	RETAINER	1
21	1H511	PIN	1
22	7L5875	LEVER ASSEM.	1
23	7H3639	PIN	1
24	2L6049	SHAFT	1
25	T284	BOLT	1
26	1A9109	LOCK	2
27	S292	BOLT	1
28	3B4506	LOCKWASHER	11
29	5H9706	BOLT	2
30	5B5492	WASHER	1
31	6B8238	SEAL	1

32	2L6044	ADAPTER ASSEM. (Includes)	1
33	9F5647	BUSHING	2
34	9F162	BUSHING	1
35	9M1702	PINION ASSEM. (Includes)	1
36	9M1704	CAGE ASSEM.	1
37	6H3492	WASHER	1
38	4B6697	BOLT	4
	9F1490	LOCKWASHER	2
39	9F1475	GEAR (35 teeth)	1
40	3H2417	SHIM	1
41	2A5328	LOCK	3
42	L1340	BOLT	1
43	6L3402	GASKET	1
44	S1594	BOLT	6
45	6B1478	SPRING	1
46	2L6051	SHAFT ASSEM. (Includes)	1
	2L6050	SHAFT	1
	5H1472	BALL	1
47	1H5657	WASHER	1
	8F6864	PIN	1
48	6L3401	GASKET	1
49	2L6324	BOLT	2
	L2070	BOLT (2.25 in. long)	2
50	8L8919	GOVERNOR ASSEM. (Separate Illustration)	1
51	3L4576	PLATE (name)	1
52	3L3911	SWITCH	1
53	3L9429	WIRING DIAGRAM	1
54	4B4277	WASHER	1
C 55	2S2301	SPACER	1
●	3L5682	MARKER (card of)	1

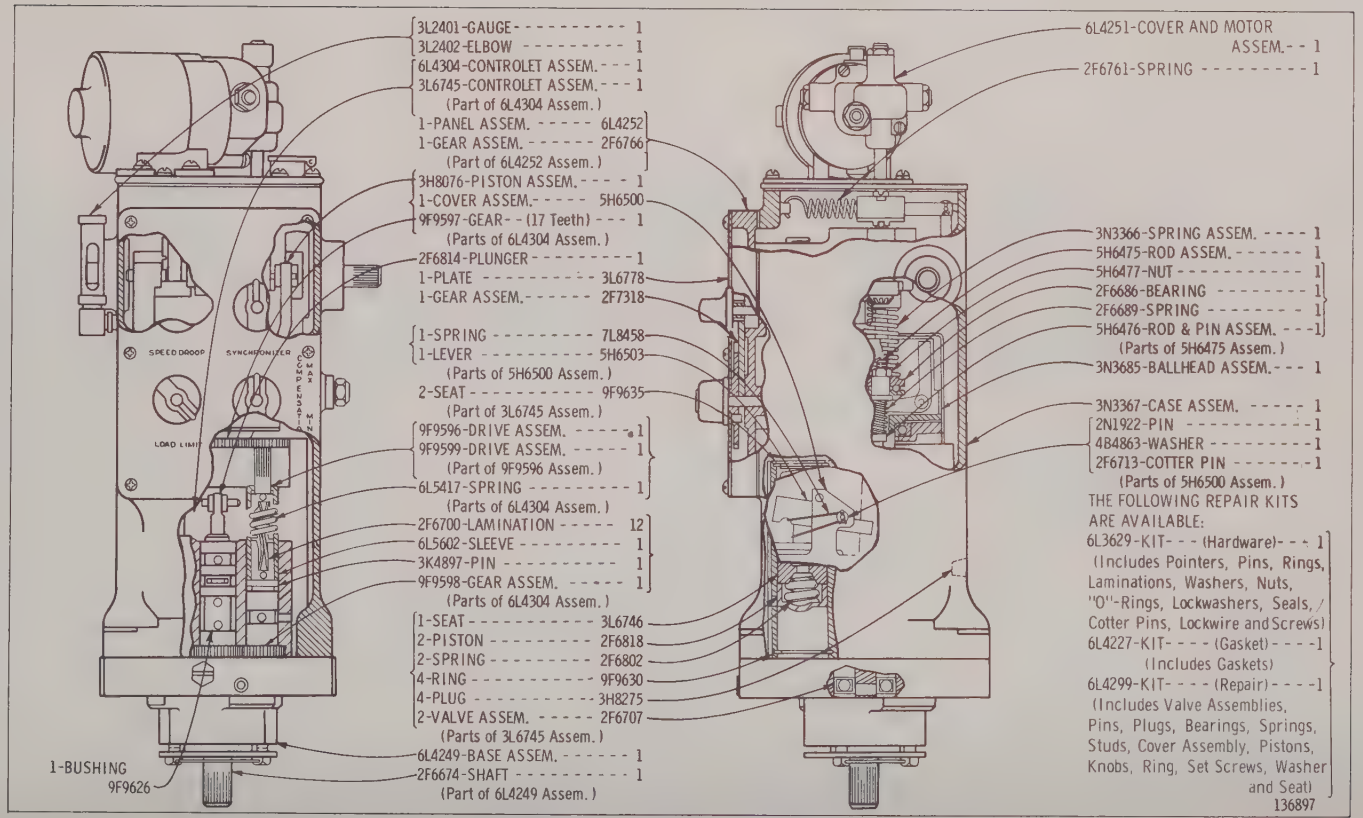
REF. NO.	PART NUMBER	DESCRIPTION	QTY
1	4N3993	LEVER ASSEM. (Includes)	1
	2N7353	CLAMP	1
2	2N6345	SPRING	1
3	4N6916	LEVER	1
C 4	6H5474	RING	1
5	2N6341	PIN	1
C	5B8075	PIN (taper)	1
6	1K502	WASHER	1
C 7	4B3388	BOLT	1
8	3B4505	LOCKWASHER	4
9	2S2301	SPACER	1
C 10	1B9575	BOLT	2

● NOT SHOWN

C INDICATES CHANGE

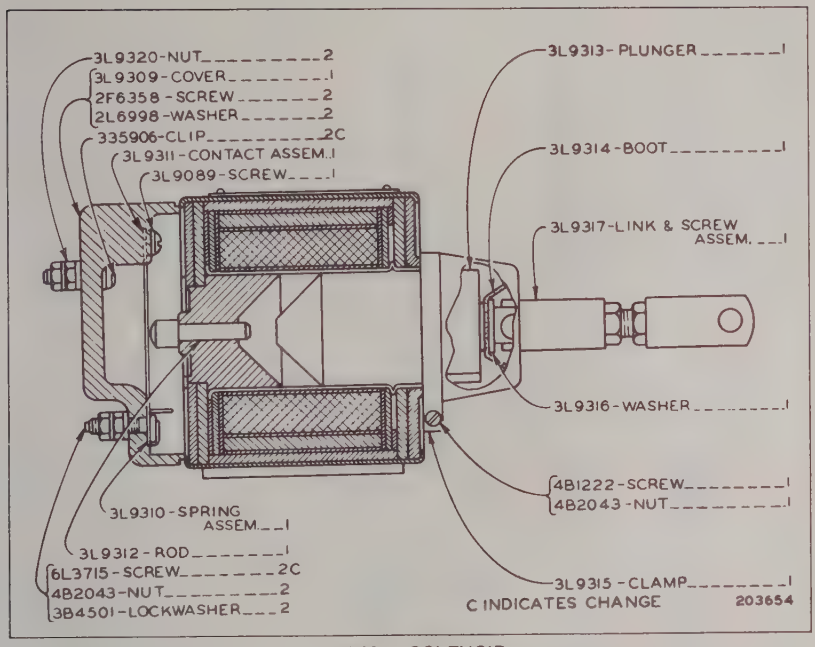
146468

2N5892 WOODWARD GOVERNOR GROUP—Type 3
Part of 7L5877 and 3N877 Automatic Start-Stop Arrangements and 8L4474
Governor Arrangement listed on Pages 128A, 128B and 136B
8L8919 Governor parts are shown on Page 128H

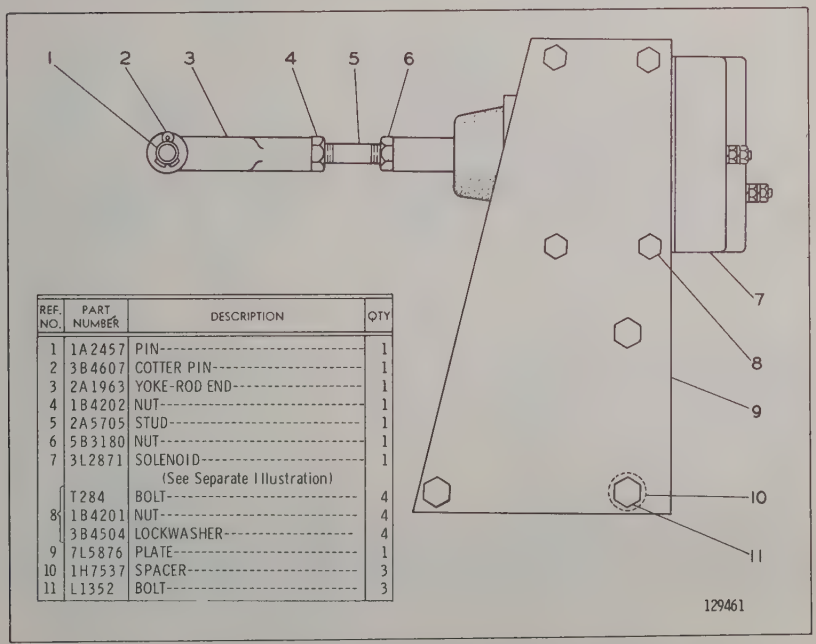


8L8919 WOODWARD GOVERNOR GROUP

Part of 6N111, 2N5892 and 2L6054 Woodward Governor Groups shown on Pages 128B-4, 128F, 128G, 136 and 136A

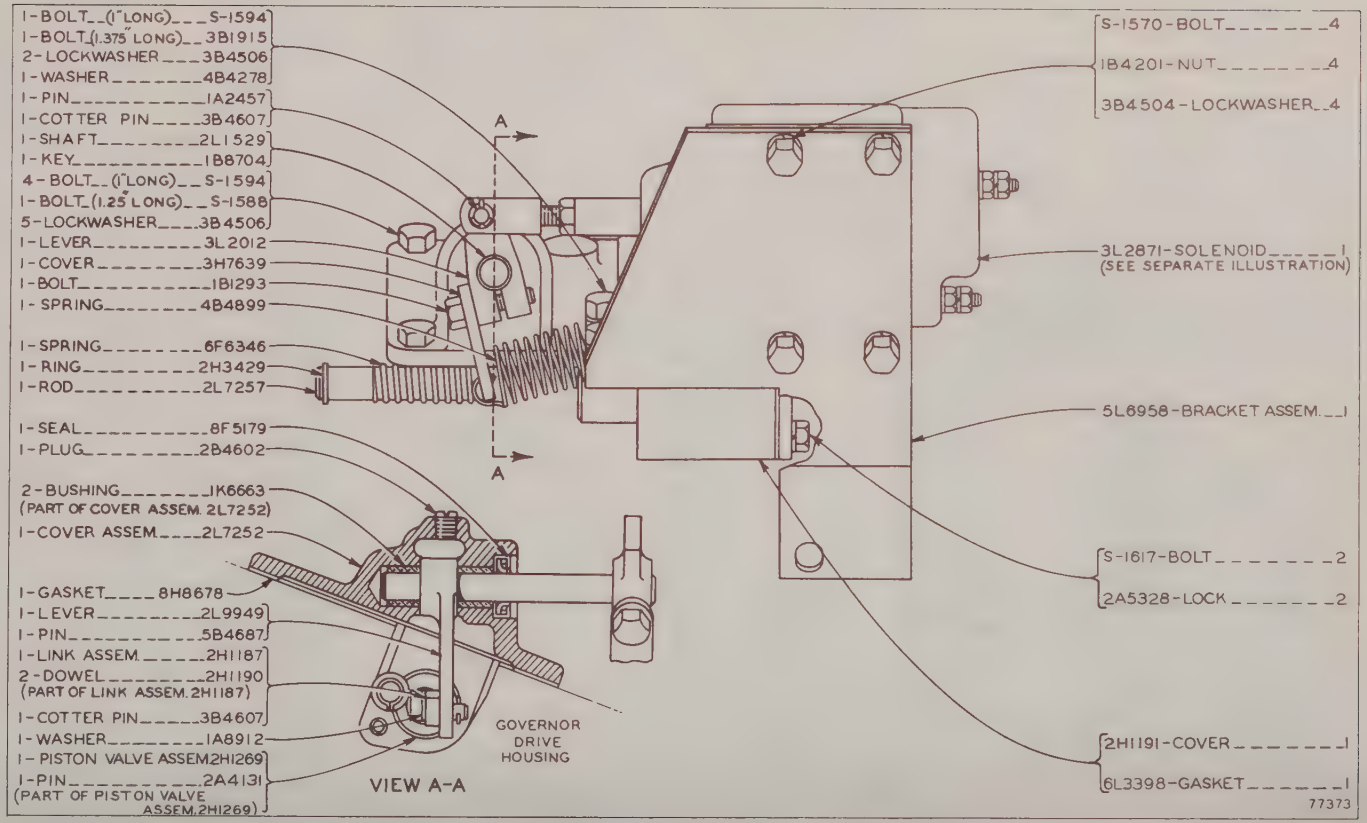


3L2871 SOLENOID
Part of 5L6959 Rack Solenoid Group, 2N5802 and 6N160 Solenoid Shut-Off Group shown on Pages 129, 130 and 130B



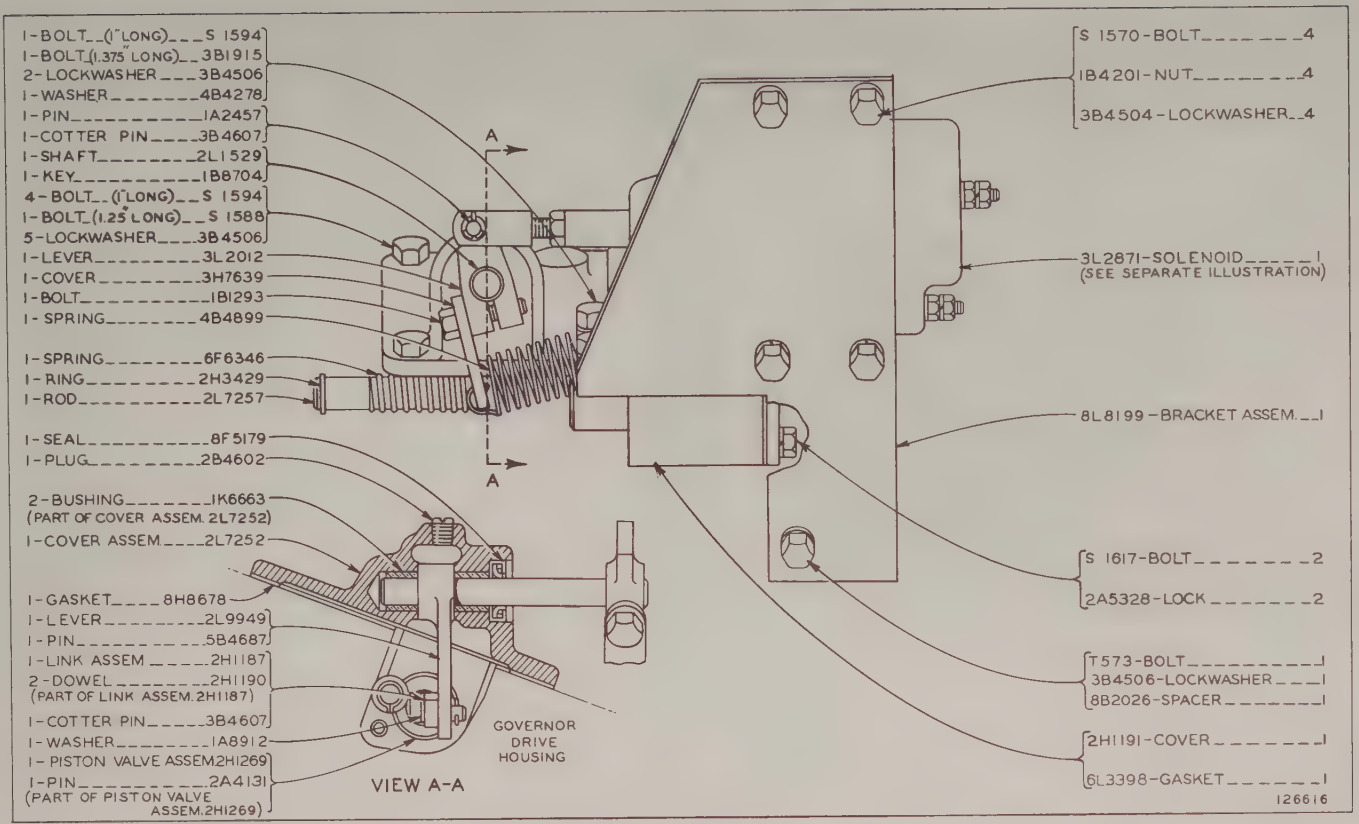
REF. NO.	PART NUMBER	DESCRIPTION	QTY
1	1A2457	PIN	1
2	3B4607	COTTER PIN	1
3	2A1963	YOKE-ROD END	1
4	1B4202	NUT	1
5	2A5705	STUD	1
6	5B3180	NUT	1
7	3L2871	SOLENOID (See Separate Illustration)	1
8	T284	BOLT	4
	1B4201	NUT	4
	3B4504	LOCKWASHER	4
9	7L5876	PLATE	1
10	1H7537	SPACER	3
11	L1352	BOLT	3

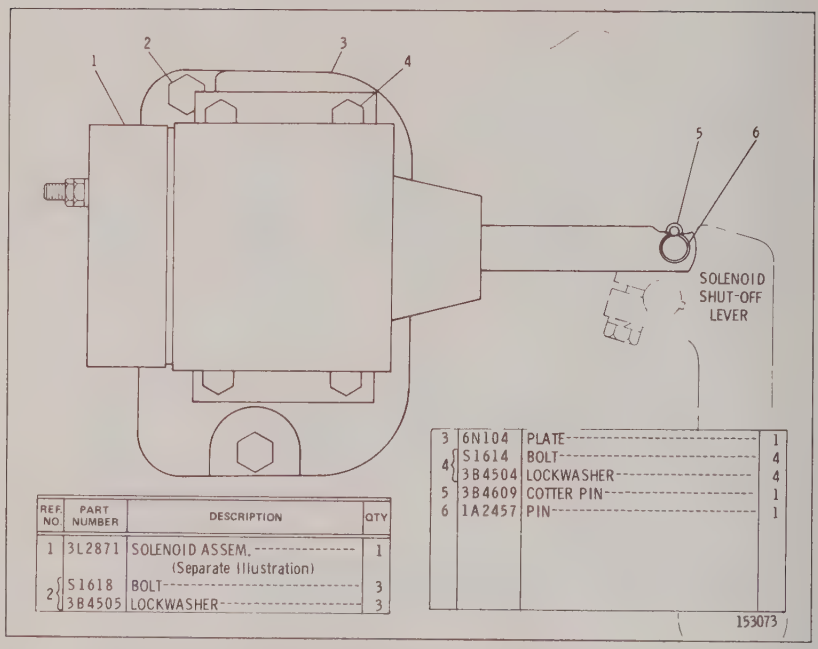
2N5802 SOLENOID SHUT-OFF GROUP
Part of 7L5877 and 3N877 Automatic Start-Stop Arrangements listed on Pages 128A and 128B



5L6959 RACK SOLENOID GROUP—Type 1
Serial No. 46B1558 to 46B5064 inclusive
3L2871 Solenoid parts are shown on Page 129

5L6959 RACK SOLENOID GROUP—Type 2
Serial No. 46B1558 to 46B5064 inclusive
3L2871 Solenoid parts are shown on Page 129

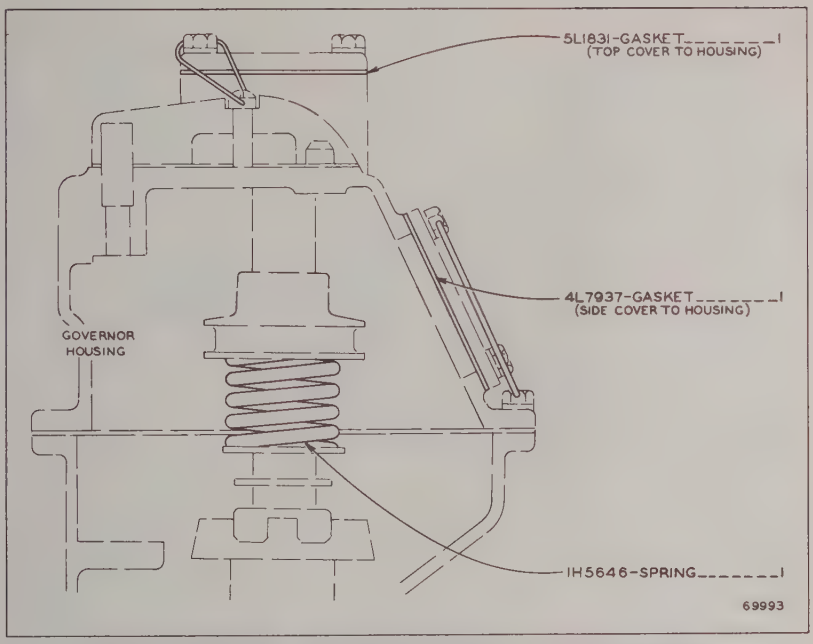




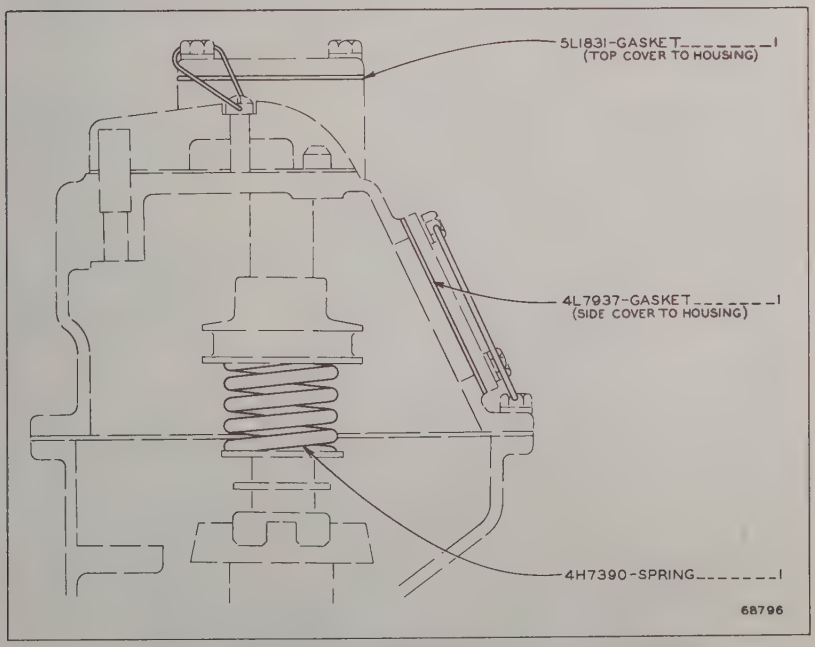
REF. NO.	PART NUMBER	DESCRIPTION	QTY
1	3L2871	SOLENOID ASSEM. (Separate Illustration)	1
2	S1618	BOLT	3
	3B4505	LOCKWASHER	3
3	6N104	PLATE	1
4	S1614	BOLT	4
	3B4504	LOCKWASHER	4
5	3B4609	COTTER PIN	1
6	1A2457	PIN	1

6N160 SOLENOID SHUT-OFF GROUP

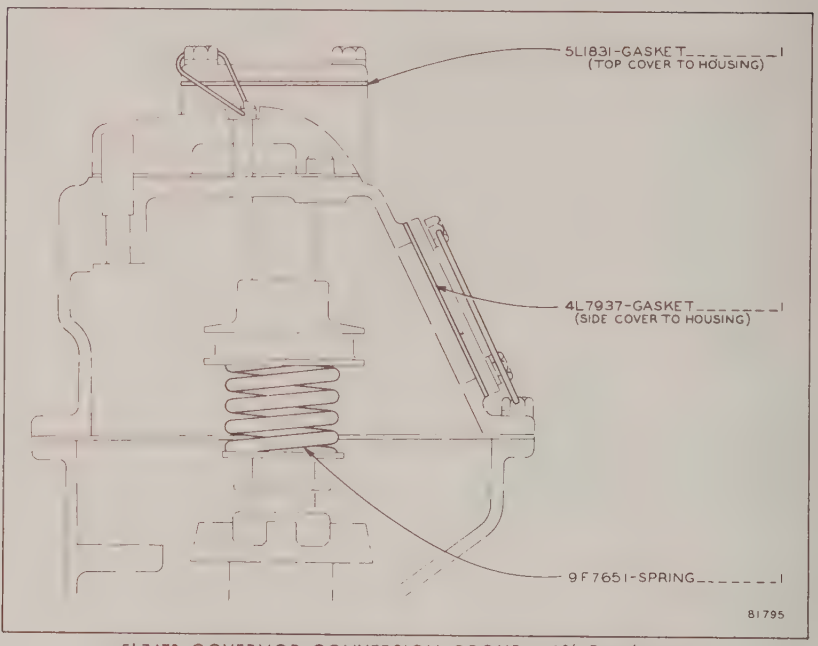
Serial No. 46B5065—Up. 3L2871 Solenoid parts are shown on Page 129. REFER TO AUTOMATIC START-STOP CHART SHOWN ON PAGE 128B-2 FOR USAGE



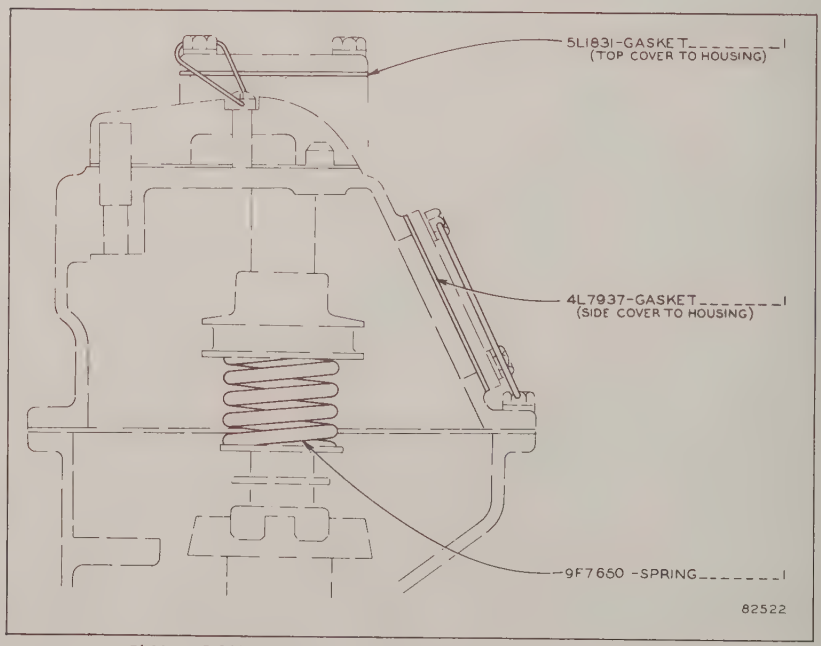
5L7472 GOVERNOR CONVERSION GROUP—3 Percent Regulation
Serial No. 46B1558 to 46B5064 inclusive



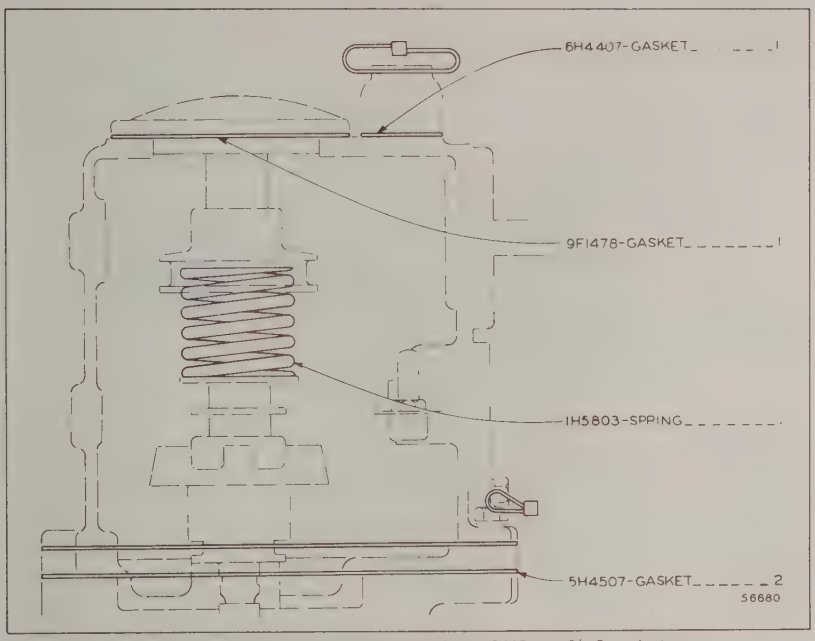
5L6945 GOVERNOR CONVERSION GROUP—3 Percent Regulation
Serial No. 46B1558 to 46B5064 inclusive



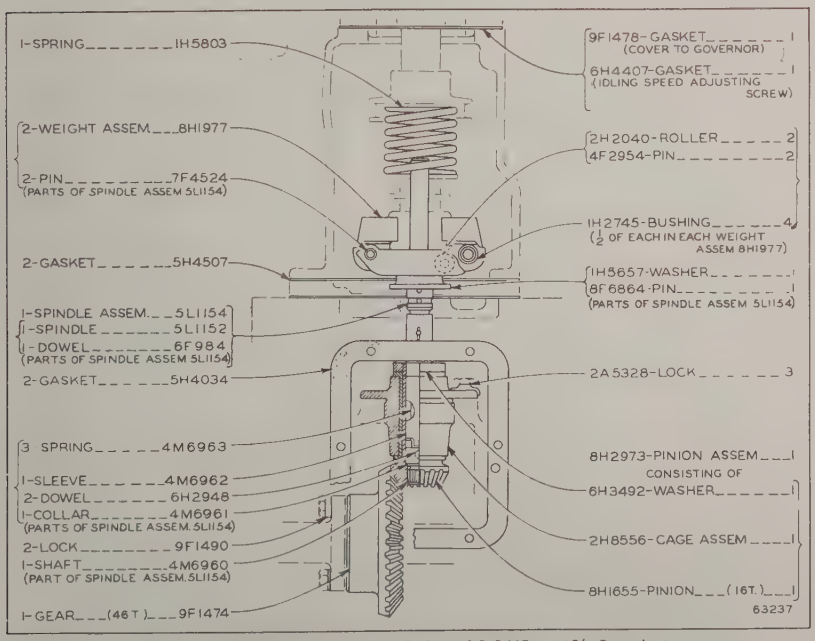
5L7473 GOVERNOR CONVERSION GROUP—10% Regulation



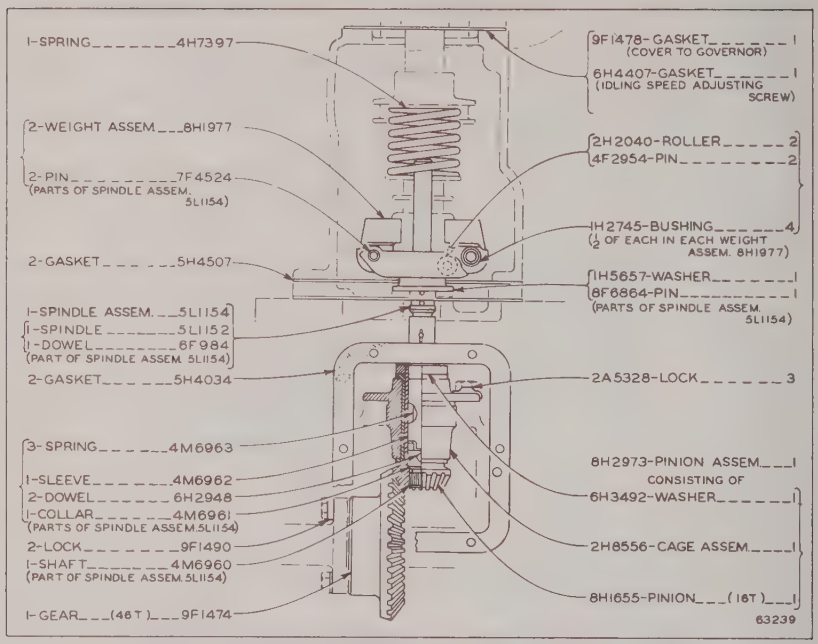
5L9806 GOVERNOR CONVERSION GROUP—10% Regulation



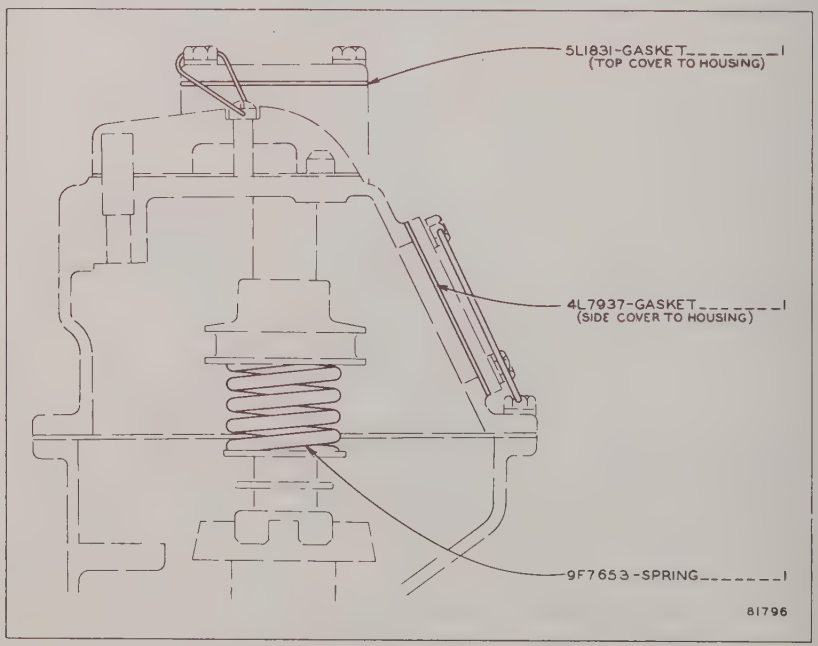
3L7909 GOVERNOR CONVERSION GROUP—10% Regulation



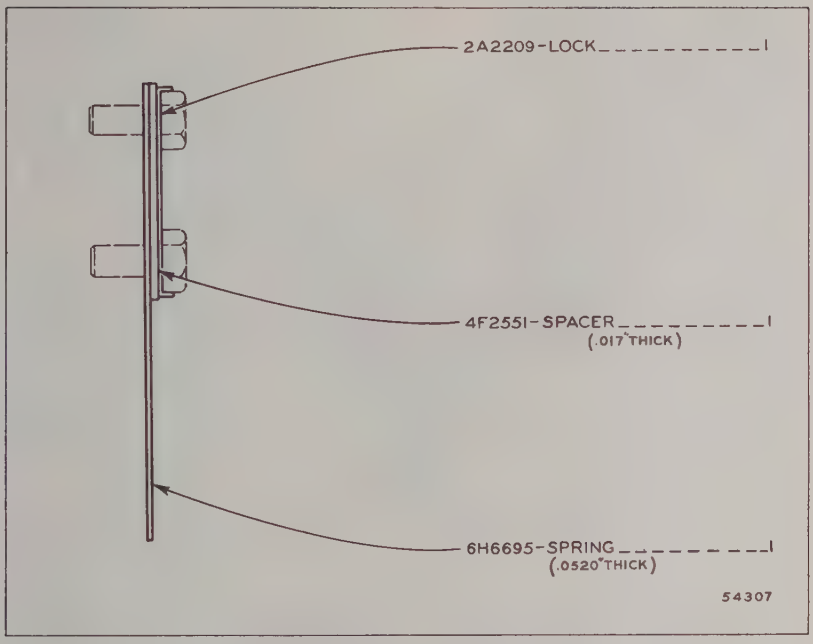
3L7912 GOVERNOR CONVERSION GROUP—10% Regulation



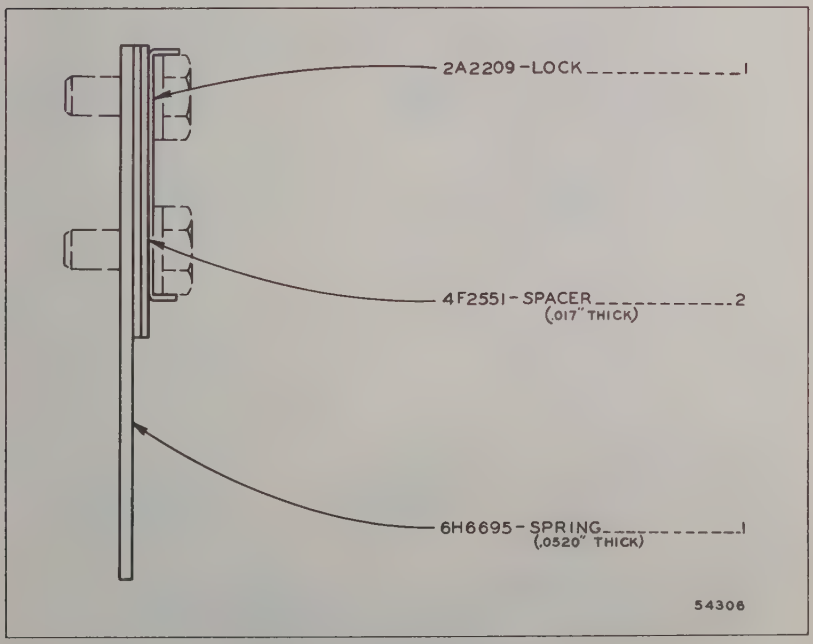
3L7915 GOVERNOR CONVERSION GROUP—10 Percent Regulation



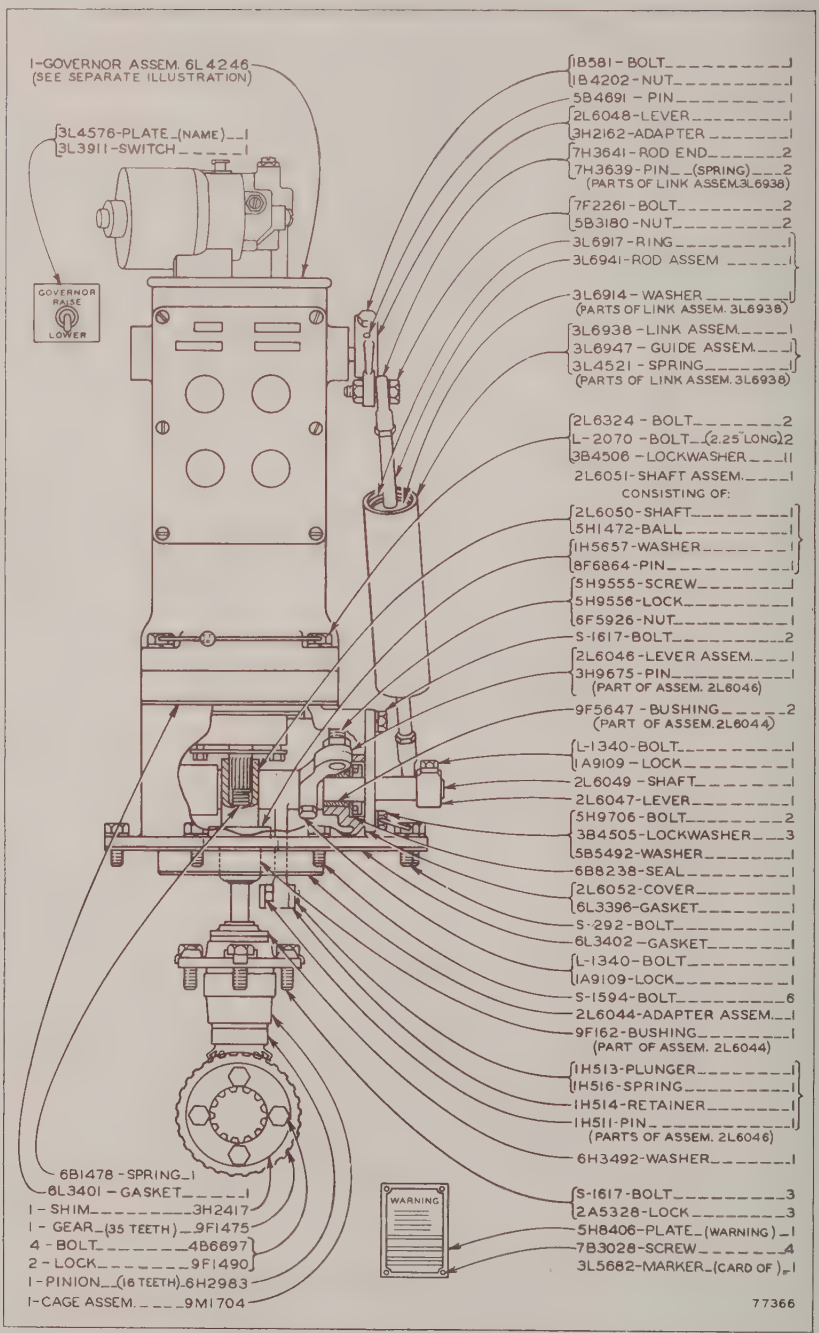
5L7474 GOVERNOR CONVERSION GROUP—10 Percent Regulation
Serial No. 46B1558 to 46B5064 inclusive



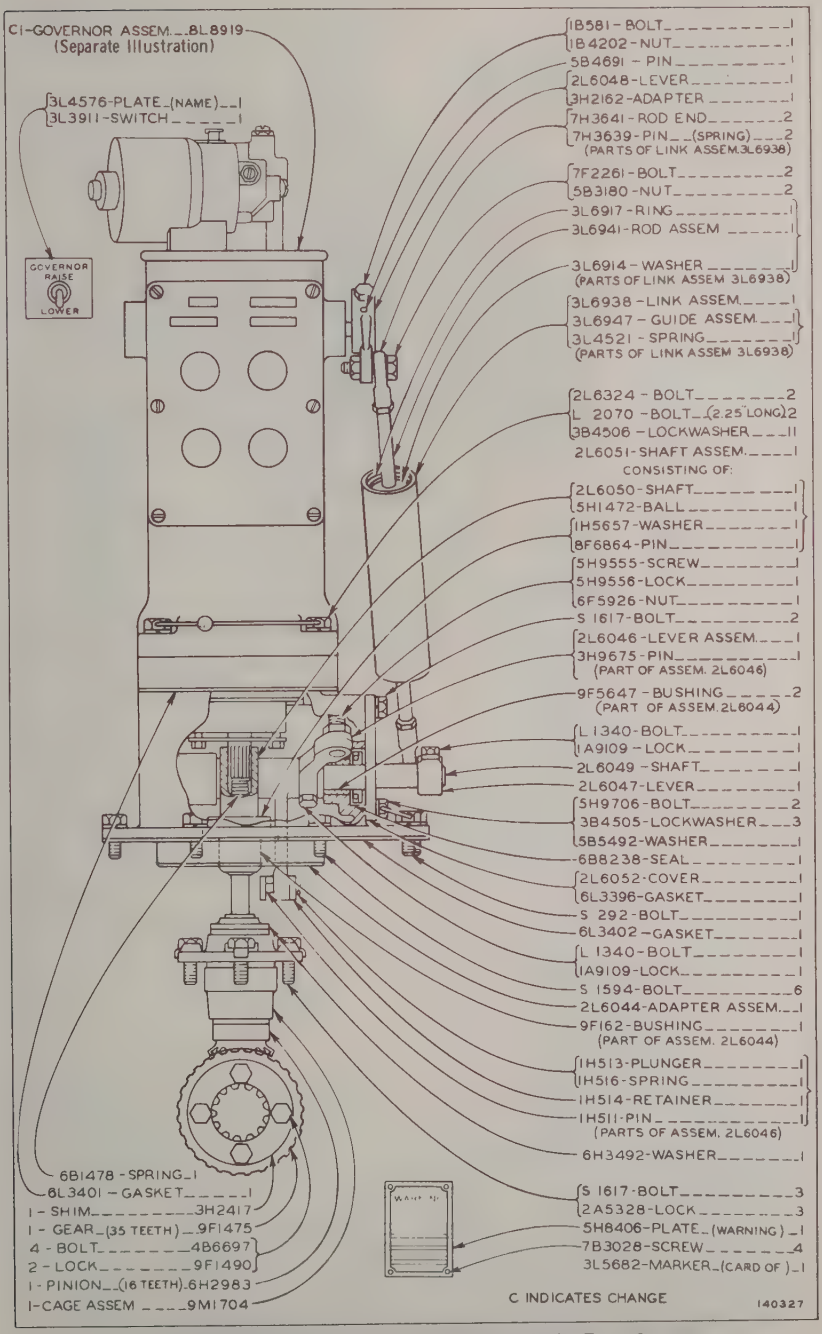
3L8309 TORQUE SPRING GROUP
Serial No. 46B1558 to 46B5064 inclusive
Only separate parts serviced



3L7914 TORQUE SPRING GROUP
Only separate parts serviced

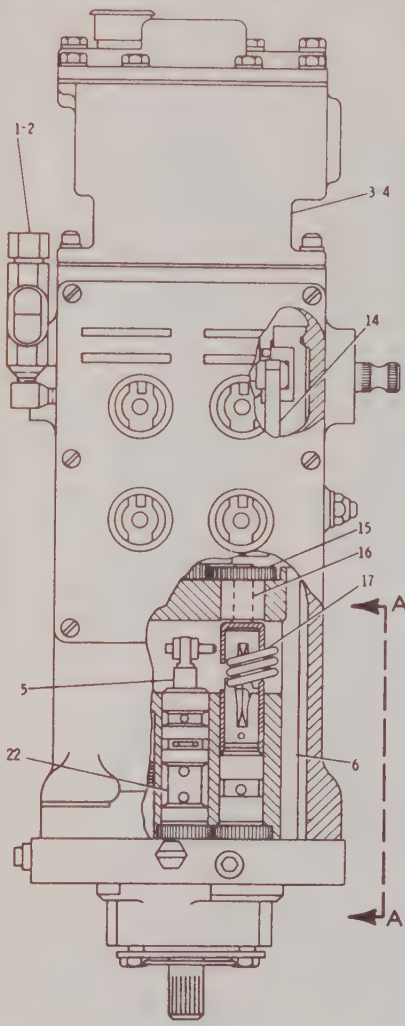


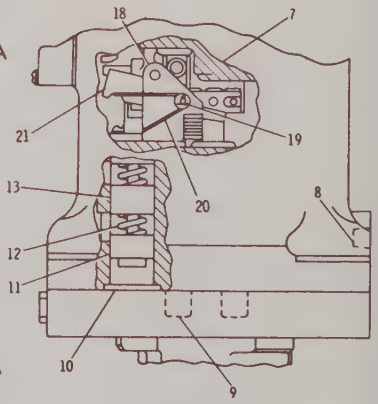
2L6054 WOODWARD GOVERNOR GROUP—Type 1
Also part of 8L4474 Woodward Governor Arrangement listed on Page 136B
6L4246 Governor parts are shown on Page 137. Only separate parts are serviced. When complete Group is required order 2N5892 shown on pages 128F and 128G



2L6054 WOODWARD GOVERNOR GROUP—Type 2

Also part of 8L4474 Woodward Governor Arrangement listed on Page 136B. 8L8919 Governor parts are shown on Page 128H. Only separate parts serviced. When complete Group is required order 2N5892 shown on Pages 128F and 128G





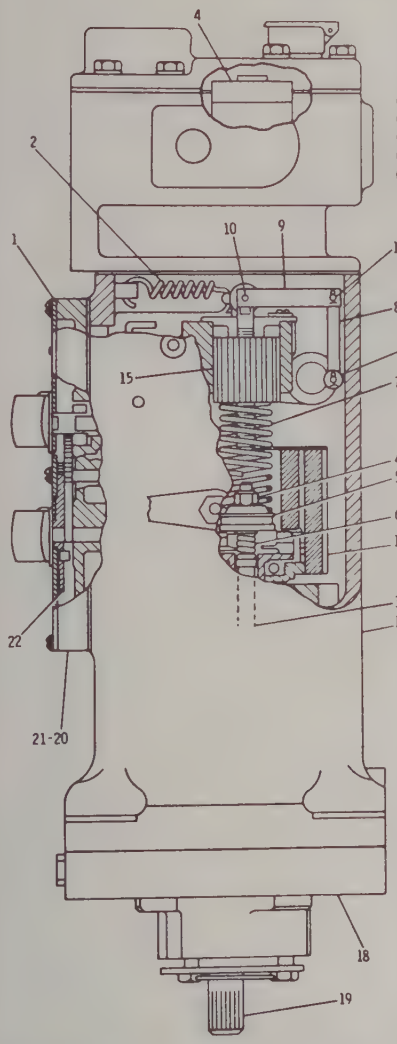
VIEW A-A

REF. NO.	PART NUMBER	DESCRIPTION	QTY.
	6L4304	CONTROLET ASSEM. (Includes)	1
6	3L6745	CONTROLET ASSEM. (Includes)	1
	8F9914	CONTROLET	1
7	9F9635	WASHER	2
8	9F2247	PLUG	4
9	2F6707	VALVE ASSEM.	2
10	9F9630	RING	4
11	2F6818	PISTON	2
12	2V6802	SPRING	2
13	3L6746	SEAT	1
14	3H8076	PISTON ASSEM.	1
15	9F9597	GEAR-----(17 teeth)	1
16	9F9596	DRIVE ASSEM.	1
17	6L5417	SPRING	1
18	5H6500	LEVER ASSEM. (Includes)	1
	2N1922	PIN	1
19	2F6713	COTTER PIN	1
	4F2317	WASHER	1
20	7L8458	SPRING	1
21	5H6503	LEVER	1
	7N8444	GAUGE------(oil level)	1
2	3L2402	FITTING	1
3	7N8325	COVER ASSEM. (Includes)	1
C	8N4905	COVER	1
C 4	8N4903	MOTOR ASSEM.	1
5	2F6814	PLUNGER	1
22	9F9626	BUSHING	1

C INDICATES CHANGE

234514

7N2703 WOODWARD GOVERNOR GROUP—UG8D—110—Part 1—
Replaced by 7N9923 shown on Pages 136A-3 through 136A-6



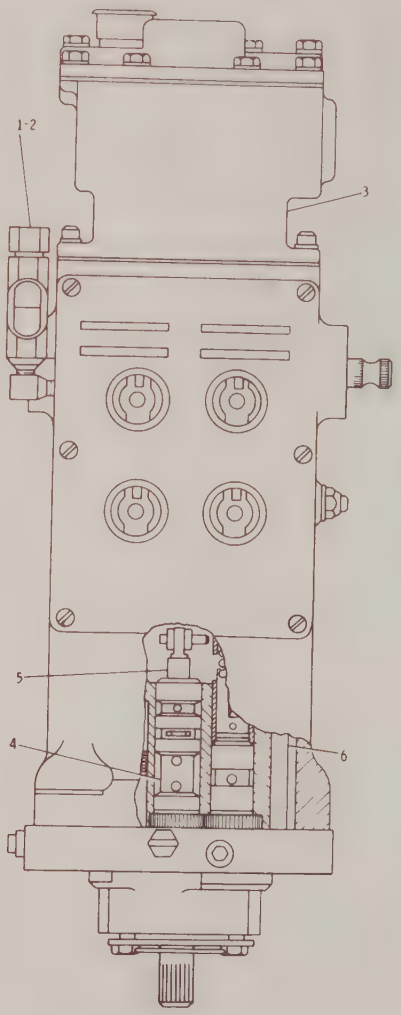
7	3N3366	SPRING ASSEM.	1
8	3L7235	SCREW ASSEM. (Includes)	1
9	2F6693	LEVER	1
10	2F6691	PIN	1
C 11	2F6763	PIN	1
C 12	2F6713	COTTER	3
C 13	2F6738	LINK	1
C 14	2F6746	WASHER	1
C 15	9F9706	GEAR	1

C 16	3N3685	BALLHEAD ASSEM.	1
17	7N6287	CASE ASSEM.	1
18	6L4249	BASE ASSEM. (Includes)	1
19	2F6674	SHAFT	1
20	6L4252	PANEL ASSEM. (Includes)	1
21	2F6766	GEAR ASSEM.	1
22	7N9119	GEAR ASSEM.	1
		THE FOLLOWING REPAIR KITS ARE AVAILABLE:	
C	8N4904	KIT-(PC Board Conversion) (Includes board assem., decal, resistor assem., screws, and installation instructions)	1
	6L3629	KIT-(hardware) (Includes pointers, pins, rings, laminations, washers, nuts, "O" rings, lockwashers, seals cotter pins, lockwire & screws)	1
	7N9121	KIT-(gasket)	1
C	6L4229	KIT-(repair) (Includes valve assemblies, pins, plugs, bearings, springs, studs, cover assembly, pistons, knobs, ring, sets screws, washer and seat)	1

C INDICATES CHANGE 233162

REF. NO.	PART NUMBER	DESCRIPTION	QTY
1	3L6778	PLATE	1
2	2F6761	SPRING	1
3	5H6475	ROD ASSEM. (Includes)	1
	5H6476	ROD & PIN ASSEM.	1
4	7N7578	LOCKNUT	1
5	2F6686	BEARING	1
6	2F6689	SPRING	1

7N2703 WOODWARD GOVERNOR GROUP—UG8D-110 Volt—Part 2—
Replaced by 7N9923 shown on Pages 136A-3 through 136A-6



REF. NO.	PART NUMBER	DESCRIPTION	QTY.
1	7N8444	GAUGE------(oil level)----------	1
2	3L2402	FITTING----------	1
3	7N8325	COVER ASSEM. ----------	1
4	9F9626	BUSHING----------	1
5	2F6814	PLUNGER----------	1
6	8N5069	CONTROLET ASSEM. ----------	1
		(Separate Illustration)	

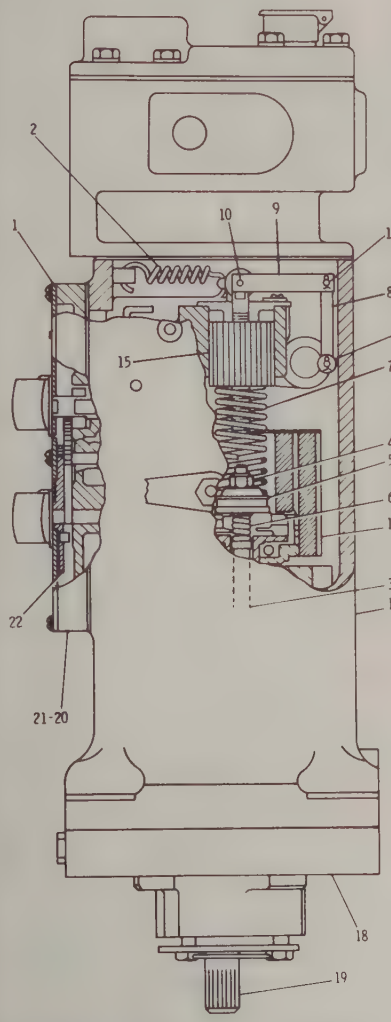
THE FOLLOWING REPAIR KIT IS AVAILABLE:

8N4904	KIT------(PC Board Conversion)	1

177656

7N9923 WOODWARD GOVERNOR GROUP—UG8D—110—Part 1—Type 1

8N5069 Controlet Assembly parts are shown on Page 136A-8



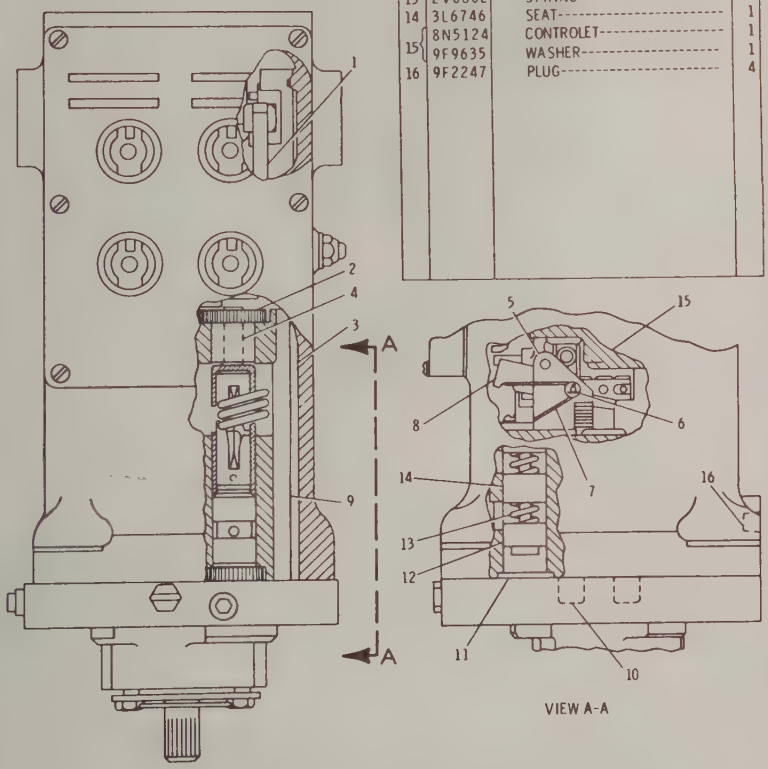
REF. NO.	PART NUMBER	DESCRIPTION	QTY
1	3L6778	PLATE	1
2	2F6761	SPRING	1
3	5H6475	ROD ASSEM. (Includes)	1
	5H6476	ROD & PIN ASSEM.	1
4	7N7578	LOCKNUT	1
5	2F6686	BEARING	1
6	2F6689	SPRING	1
7	8N5119	SPRING ASSEM.	1
8	3L7235	SCREW ASSEM. (Includes)	1
9	2F6693	LEVER	1
10	2F6691	PIN	1
11	2F6763	PIN	1
12	2F6713	COTTER	3
13	2F6738	LINK	1
14	2F6746	WASHER	1
15	9F9706	GEAR	1
16	8N5123	BALLHEAD ASSEM.	1
17	7N6287	CASE ASSEM.	1
18	6L4249	BASE ASSEM. (Includes)	1
19	2F6674	SHAFT	1
20	6L4252	PANEL ASSEM. (Includes)	1
21	2F6766	GEAR ASSEM.	1
22	7N9119	GEAR ASSEM.	1

THE FOLLOWING REPAIR KITS ARE AVAILABLE:

6L3629	KIT----------(hardware)----------	1
	(Includes pointers, pins, rings, laminations, washers, nuts, "O" rings, lockwashers, seals cotter pins, lockwire & screws)	
7N9121	KIT----------(gasket)----------	1
6L4299	KIT----------(repair)----------	1
	(Includes valve assemblies, pins, plugs, bearings, springs, studs, cover assembly, pistons, knobs, ring, sets screws, washer and seat)	

221842

4	9F9596	DRIVE ASSEM.	1
5	5H6500	LEVER ASSEM. (Includes)	1
6	2N1922	PIN	1
	2F6713	COTTER PIN	1
	4F2317	WASHER	1
7	7F8458	SPRING	1
8	5H6503	LEVER	1
9	8N5122	CONTROLET ASSEM. (Includes)	1
10	2F6707	VALVE ASSEM.	2
11	9F9630	RING	4
12	2F6818	PISTON	2
13	2V6802	SPRING	2
14	3L6746	SEAT	1
15	8N5124	CONTROLET	1
	9F9635	WASHER	1
16	9F2247	PLUG	4



REF. NO.	PART NUMBER	DESCRIPTION	QTY.
1	8N5121	PISTON ASSEM.	1
2	9F9597	GEAR (17 teeth)	1
3	8N5120	SPRING	1

234518

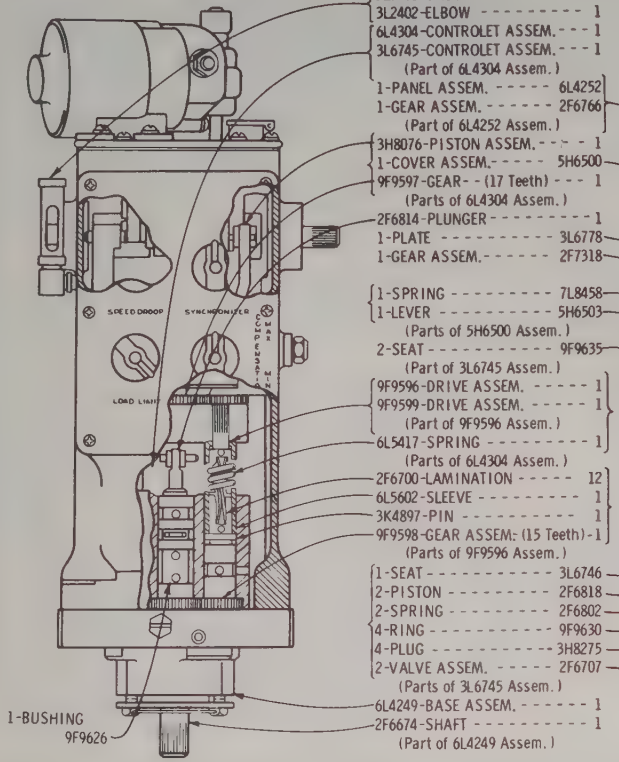
8N5069 CONTROLET ASSEMBLY
Part of 7N9923 Woodward Governor Group shown on Pages 136A-3 and 136A-5

		CONSISTS OF:	PAGE
1	2L6054	WOODWARD GOVERNOR GROUP	136
	- OR -		
1	2N5892	WOODWARD GOVERNOR GROUP	128F
6	2N3946	FUEL INJECTION VALVE ASSEMBLY	

8L4474 WOODWARD GOVERNOR ARRANGEMENT
Serial No. 46B2387 to 46B5064 inclusive

6L4246 WOODWARD GOVERNOR ASSEMBLY

Part of 2L6054 Woodward Governor Group shown on Page 136



- 3L2401-GAUGE - - - - - - - - - - 1
- 3L2402-ELBOW - - - - - - - - - - 1
- 6L4304-CONTROLET ASSEM. - - - 1
- 3L6745-CONTROLET ASSEM. - - - 1
  (Part of 6L4304 Assem.)
  - 1-PANEL ASSEM. - - - - - 6L4252
  - 1-GEAR ASSEM. - - - - - - 2F6766
  (Part of 6L4252 Assem.)
- 3H8076-PISTON ASSEM. - - - - 1
- 1-COVER ASSEM. - - - - - 5H6500
- 9F9597-GEAR - - (17 Teeth) - - - 1
  (Parts of 6L4304 Assem.)
- 2F6814-PLUNGER - - - - - - - - - 1
- 1-PLATE - - - - - - - - - - 3L6778
- 1-GEAR ASSEM. - - - - - - 2F7318
- 1-SPRING - - - - - - - - - - 7L8458
- 1-LEVER - - - - - - - - - - 5H6503
  (Parts of 5H6500 Assem.)
- 2-SEAT - - - - - - - - - - - - 9F9635
  (Part of 3L6745 Assem.)
- 9F9596-DRIVE ASSEM. - - - - - 1
- 9F9599-DRIVE ASSEM. - - - - - 1
  (Part of 9F9596 Assem.)
- 6L5417-SPRING - - - - - - - - - - 1
  (Parts of 6L4304 Assem.)
- 2F6700-LAMINATION - - - - - 12
- 6L5602-SLEEVE - - - - - - - - - - 1
- 3K4897-PIN - - - - - - - - - - - 1
- 9F9598-GEAR ASSEM. (15 Teeth) - 1
  (Parts of 9F9596 Assem.)
- 1-SEAT - - - - - - - - - - - 3L6746
- 2-PISTON - - - - - - - - - 2F6818
- 2-SPRING - - - - - - - - - - 2F6802
- 4-RING - - - - - - - - - - - 9F9630
- 4-PLUG - - - - - - - - - - - 3H8275
- 2-VALVE ASSEM. - - - - - 2F6707
  (Parts of 3L6745 Assem.)
- 6L4249-BASE ASSEM. - - - - - - 1
- 2F6674-SHAFT - - - - - - - - - - 1
  (Part of 6L4249 Assem.)

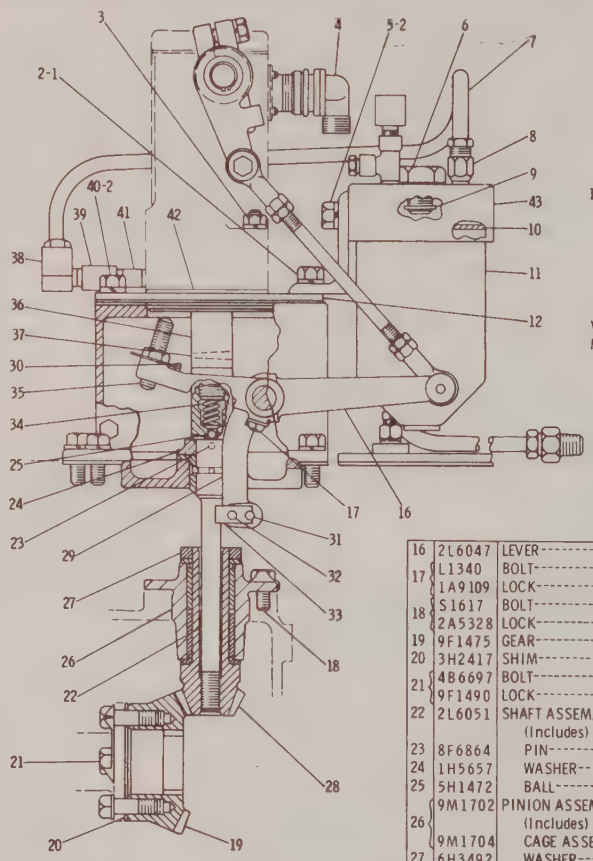
1-BUSHING 9F9626

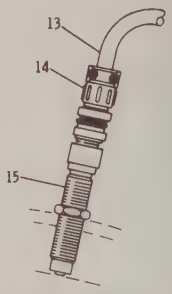
- 6L4251-COVER AND MOTOR ASSEM. - - 1
- 2F6761-SPRING - - - - - - - - - 1
- 3N3366-SPRING ASSEM. - - - - 1
- 5H6475-ROD ASSEM. - - - - - - 1
- 5H6477-NUT - - - - - - - - - - - 1
- 2F6686-BEARING - - - - - - - - 1
- 2F6689-SPRING - - - - - - - - 1
- 5H6476-ROD & PIN ASSEM. - - - 1
  (Parts of 5H6475 Assem.)
- 3N3685-BALLHEAD ASSEM. - - - 1
- 3N3367-CASE ASSEM. - - - - - - 1
- 2N1922-PIN - - - - - - - - - - - - 1
- 4B4863-WASHER - - - - - - - - - - 1
- 2F6713-COTTER PIN - - - - - - - 1
  (Parts of 5H6500 Assem.)

THE FOLLOWING REPAIR KITS ARE AVAILABLE:

- 6L3629-KIT - - - - - (Hardware) - - - - - 1
  (Includes Pointers, Pins, Rings, Laminations, Washers, Nuts, "O"-Rings, Lockwashers, Seals, Cotter Pins, Lockwire and Screws)
- 6L4227-KIT - - - - - - (Gasket) - - - - - - 1
  (Includes Gaskets)
- 6L4299-KIT - - - - - - (Repair) - - - - - - 1
  (Includes Valve Assemblies, Pins, Plugs, Bearings, Springs, Studs, Cover Assembly, Pistons, Knobs, Ring, Set Screws, Washer and Seat)

115097





VIEW OF FLYWHEEL MAGNETIC PICK-UP

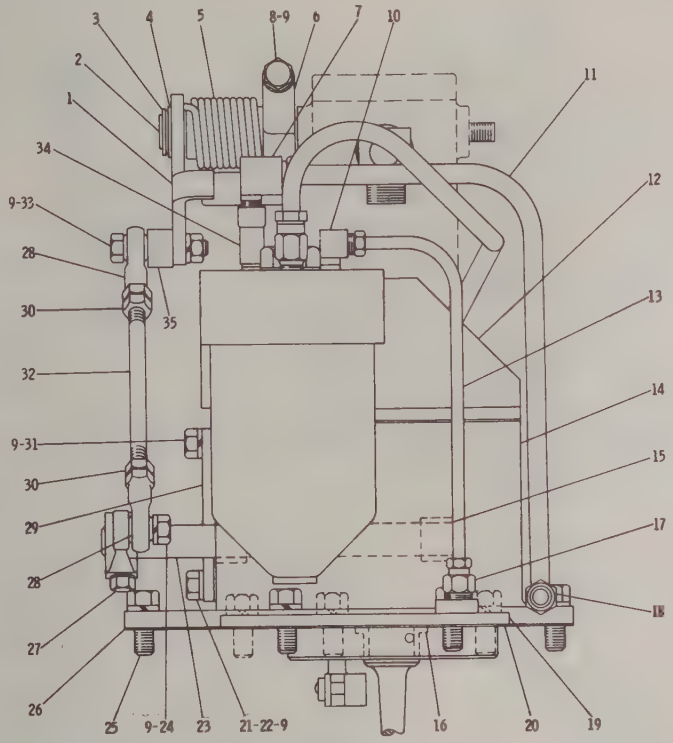
REF. NO.	PART NUMBER	DESCRIPTION	QTY
1	3B1915	BOLT	2
2	3B4506	LOCKWASHER	6
3	1N5946	STUD	2
	1D4716	NUT	2
	3B4505	LOCKWASHER	2
4	8L8424	CONNECTOR	1
5	L1351	BOLT	2
6	8H2807	NUT	1
	2A1162	GASKET	1
7	4N5848	TUBE ASSEM.	1
8	7K1457	FITTING	1
9	1L3769	RING	1
10	8H2778	GASKET	1
11	8H2810	CASE ASSEM.	1
12	5L9200	ADAPTER	1
	6L3401	GASKET	1
▲ 13	4S8776	CONDUIT-48 in.	
14	1N7938	CONNECTOR	1
15	8L4171	MAGNETIC PICK-UP	1

▲ ORDER BY THE FOOT

16	2L6047	LEVER	1
17	L1340	BOLT	1
	1A9109	LOCK	1
18	S1617	BOLT	3
	2A5328	LOCK	3
19	9F1475	GEAR	1
20	3H2417	SHIM	1
21	4B6697	BOLT	4
	9F1490	LOCK	2
22	2L6051	SHAFT ASSEM. (Includes)	1
23	8F6864	PIN	1
24	1H5657	WASHER	1
25	5H1472	BALL	1
26	9M1702	PINION ASSEM. (Includes)	1
	9M1704	CAGE ASSEM.	1
27	6H3492	WASHER	1
28	6H2983	PINION	1
29	2L6046	LEVER ASSEM. (Includes)	1
30	3H9675	PIN	1
31	1H513	PLUNGER	1
	1H516	SPRING	1
32	1H511	PIN	1
33	1H514	RETAINER	1
34	6B1478	SPRING	1
	5H9555	SCREW	1
35	6F5926	NUT	1
	5H9556	LOCK	1
36	4N5686	COUPLING ASSEM. (Includes)	1
37	5B4685	PIN	1
38	1L6939	ELBOW	1
39	3B6487	COUPLING	1
40	1A2029	BOLT	2
41	8B2283	NIPPLE	1
42	4N6497	GASKET	1
43	7L2051	COVER ASSEM.	1

145585

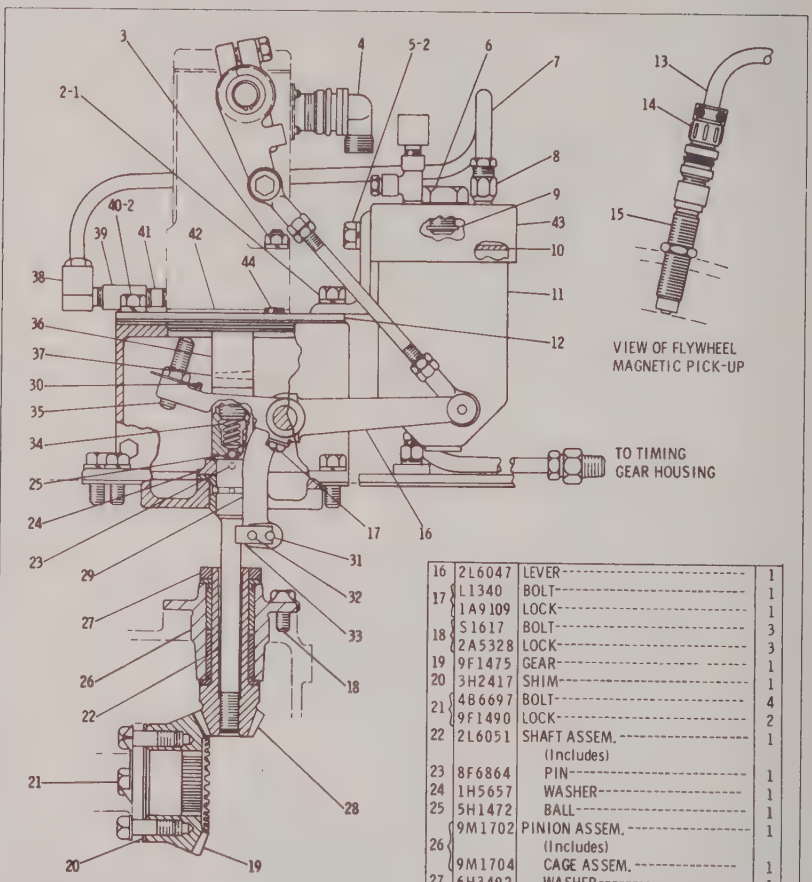
4N5403 WOODWARD GOVERNOR DRIVE GROUP—Electric—Part 1
Serial No. 46B4438—Up
2N9044 Actuator is available



REF. NO.	PART NUMBER	DESCRIPTION	QTY
1	4N3993	LEVER ASSEM. (Includes)	1
	4N6916	LEVER	1
2	2N6341	PIN	1
3	8F4610	RING	1
4	1K502	WASHER	1
5	2N6345	SPRING	1
6	2N7353	CLAMP	1
7	1L6939	ELBOW	1
8	4B3388	BOLT	1
9	3B4505	LOCKWASHER	6
10	5K9243	ELBOW	1
11	4N5847	TUBE ASSEM.	1
12	8L8583	ANGLE	1
13	4N5849	TUBE ASSEM.	1
14	2L6044	ADAPTER ASSEM. (Includes)	1
15	9F5647	BUSHING	2
16	1H5661	BUSHING	1
17	5K9239	FITTING	1
18	5K9246	FITTING	1
19	8L9622	COVER ASSEM.	1
20	8H8678	GASKET	1
21	5H9706	BOLT-------(.875 in. long)	2
22	5B5492	WASHER	1
23	2L6049	SHAFT	1
24	2B2695	BOLT	1
	S1594	BOLT	6
25	S292	BOLT--------(drilled head)	1
	3B4506	LOCKWASHER	7
26	6L3402	GASKET	1
27	T284	BOLT	1
	3B4504	LOCKWASHER	1
28	7H3641	ROD END	2
29	2L6052	COVER	1
30	1B4202	NUT	2
31	S1617	BOLT--------(.75 in. long)	2
32	1L2313	ROD	1
33	1H5514	BOLT	1
	1D4716	NUT	1
34	1F9369	TEE	1
	5M6214	PLUG	1
35	9M4136	SPACER	1

145586

4N5403 WOODWARD GOVERNOR DRIVE GROUP—Electric—Part 2
Serial No. 46B4438—Up

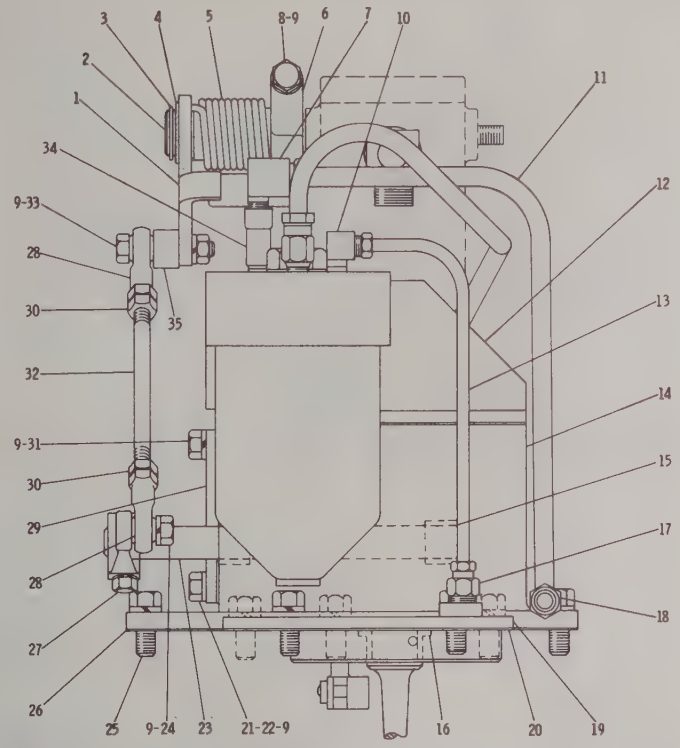


REF. NO	PART NUMBER	DESCRIPTION	QTY
1	3B1915	BOLT	2
2	3B4506	LOCKWASHER	6
	1N5946	STUD	2
C 3	1B4202	NUT	2
	3B4505	LOCKWASHER	2
4	8L8424	CONNECTOR	1
5	L1351	BOLT	2
6	8H2807	NUT	1
	2A1162	GASKET	1
7	4N5848	TUBE ASSEM.	1
8	7K1457	FITTING	1
9	1L3769	RING	1
10	8H2778	GASKET	1
11	8H2810	CASE ASSEM.	1
12	5L9200	ADAPTER	1
	6L3401	GASKET	1
▲ 13	4S8776	CONDUIT-------48 in. (12.19 dm)	
14	1N7938	CONNECTOR	1
15	8L4171	MAGNETIC PICK-UP	1
16	2L6047	LEVER	1
17	L1340	BOLT	1
	1A9109	LOCK	1
18	S1617	BOLT	3
	2A5328	LOCK	3
19	9F1475	GEAR	1
20	3H2417	SHIM	1
21	4B6697	BOLT	4
	9F1490	LOCK	2
22	2L6051	SHAFT ASSEM. (Includes)	1
23	8F6864	PIN	1
24	1H5657	WASHER	1
25	5H1472	BALL	1
26	9M1702	PINION ASSEM. (Includes)	1
	9M1704	CAGE ASSEM.	1
27	6H3492	WASHER	1
28	6H2983	PINION	1
29	2L6046	LEVER ASSEM. (Includes)	1
30	3H9675	PIN	1
31	1H513	PLUNGER	1
	1H516	SPRING	1
32	1H511	PIN	1
33	1H514	RETAINER	1
34	6B1478	SPRING	1
35	5H9555	SCREW	1
	6F5926	NUT	1
	5H9556	LOCK	1
36	4N5686	COUPLING ASSEM. (Includes)	1
37	5B4685	PIN	1
C 38	5K9235	ELBOW	1
C 39	3F2779	COUPLING	1
40	1A2029	BOLT	2
C 41	3P7738	NIPPLE	1
C 42	6N2645	GASKET	1
43	7L2051	COVER ASSEM.	1
C 44	9F2247	PLUG	1

C INDICATES CHANGE ▲ ORDER BY THE FOOT

152843

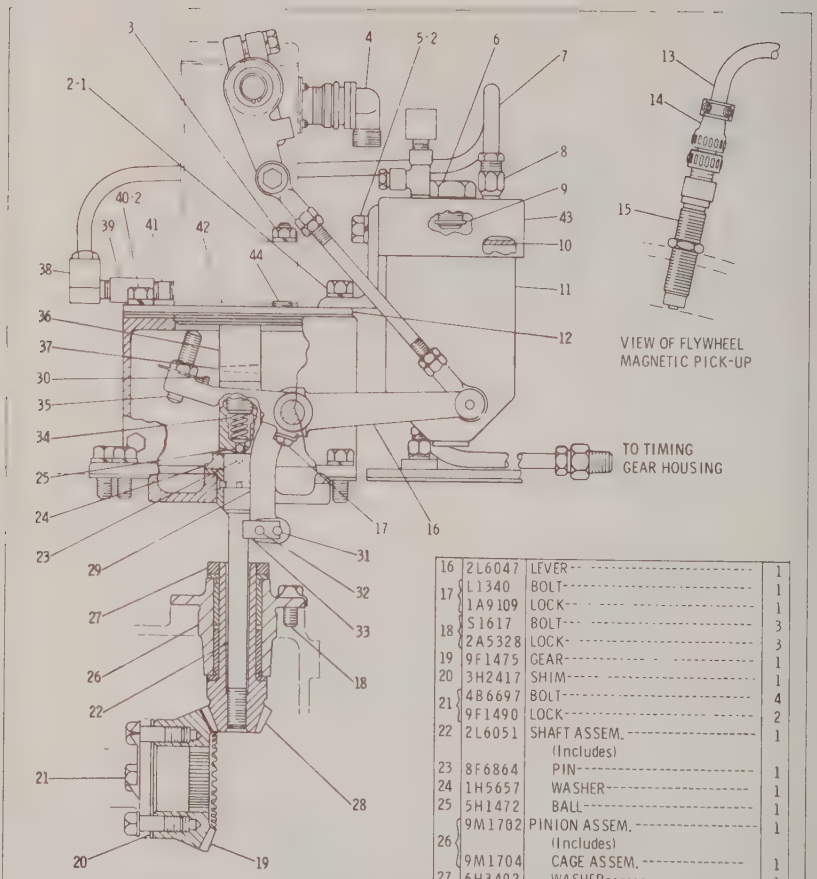
4N5403 GOVERNOR DRIVE GROUP—Part 1—Type 2
Serial No. 46B4438—Up. FOR USE WITH ELECTRIC WOODWARD GOVERNOR
Note: 4N8681 Actuator Assembly is available



REF. NO.	PART NUMBER	DESCRIPTION	QTY
C 1	4N3996	LEVER ASSEM. (Includes)	1
	4N6916	LEVER	1
2	2N6341	PIN-------(large)----------	1
	5B8075	PIN-------(small)----------	1
3	6H5474	RING	1
4	1K502	WASHER	1
5	2N6345	SPRING	1
6	2N9398	CLAMP	1
7	1L6939	ELBOW	1
8	4B3388	BOLT	1
9	3B4505	LOCKWASHER	6
10	5K9243	ELBOW	1
11	4N5847	TUBE ASSEM.	1
12	8L8583	ANGLE	1
13	4N5849	TUBE ASSEM.	1
14	2L6044	ADAPTER ASSEM. (Includes)	1
15	9F5647	BUSHING	2
16	1H5661	BUSHING	1
17	5K9239	FITTING	1
18	5K9246	FITTING	1
19	8L9622	COVER ASSEM.	1
20	8H8678	GASKET	1
21	5H9706	BOLT------.875 in.(2.23 cm) long	2
22	5B5492	WASHER	1
23	2L6049	SHAFT	1
24	2B2695	BOLT	1
25	S1594	BOLT	6
	S292	BOLT-------(drilled head)-------	1
	3B4506	LOCKWASHER	7
26	6L3402	GASKET	1
27	T284	BOLT	1
	3B4504	LOCKWASHER	1
28	7H3641	ROD END	2
29	2L6052	COVER	1
30	1B4202	NUT	2
31	S1617	BOLT-------.75 in.(1.90 cm) long	2
32	1L2313	ROD	1
33	1H5514	BOLT	1
	1D4716	NUT	1
34	1F9369	TEE	1
	5M6214	PLUG	1
35	9M4136	SPACER	1

C INDICATES CHANGE 152844

4N5403 GOVERNOR DRIVE GROUP—Part 2—Type 2
Serial No. 46B4438—Up
FOR USE WITH ELECTRIC WOODWARD GOVERNOR



VIEW OF FLYWHEEL MAGNETIC PICK-UP

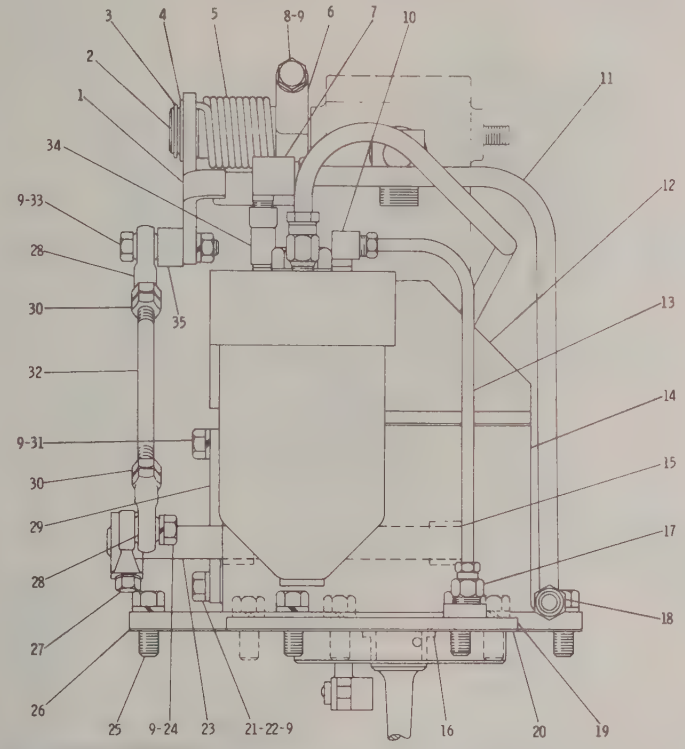
REF NO	PART NUMBER	DESCRIPTION	QTY
1	3B1915	BOLT	2
2	3B4506	LOCKWASHER	6
3	1N5946	STUD	2
	1B4202	NUT	2
	3B4505	LOCKWASHER	2
4	8L8424	CONNECTOR	1
5	L1351	BOLT	2
6	8H2807	NUT	1
	2A1162	GASKET	1
7	4N5848	TUBE ASSEM.	1
8	7K1457	FITTING	1
9	1L3769	RING	1
10	8H2778	GASKET	1
11	8H2810	CASE ASSEM.	1
12	5L9200	ADAPTER	1
	6L3401	GASKET	1
C ▲ 13	5P3390	CONDUIT----121.92 cm(48 in.)----	
14	5S7433	PLUG ASSEM.	1
15	8L4171	MAGNETIC PICK-UP	1

C INDICATES CHANGE ▲ ORDER BY THE CENTIMETRE

16	2L6047	LEVER	1
17	L1340	BOLT	1
	1A9109	LOCK	1
18	S1617	BOLT	3
	2A5328	LOCK	3
19	9F1475	GEAR	1
20	3H2417	SHIM	1
21	4B6697	BOLT	4
	9F1490	LOCK	2
22	2L6051	SHAFT ASSEM. (Includes)	1
23	8F6864	PIN	1
24	1H5657	WASHER	1
25	5H1472	BALL	1
26	9M1702	PINION ASSEM. (Includes)	1
	9M1704	CAGE ASSEM.	1
27	6H3492	WASHER	1
28	6H2983	PINION	1
29	2L6046	LEVER ASSEM. (Includes)	1
30	3H9675	PIN	1
31	1H513	PLUNGER	1
	1H516	SPRING	1
32	1H511	PIN	1
33	1H514	RETAINER	1
34	6B1478	SPRING	1
35	5H9555	SCREW	1
	6F5926	NUT	1
	5H9556	LOCK	1
36	4N5686	COUPLING ASSEM. (Includes)	1
37	5B4685	PIN	1
38	5K9235	ELBOW	1
39	3F2779	COUPLING	1
40	1A2029	BOLT	2
41	3P7738	NIPPLE	1
42	6N2645	GASKET	1
43	7L2051	COVER ASSEM.	1
44	9F2247	PLUG	1

158930

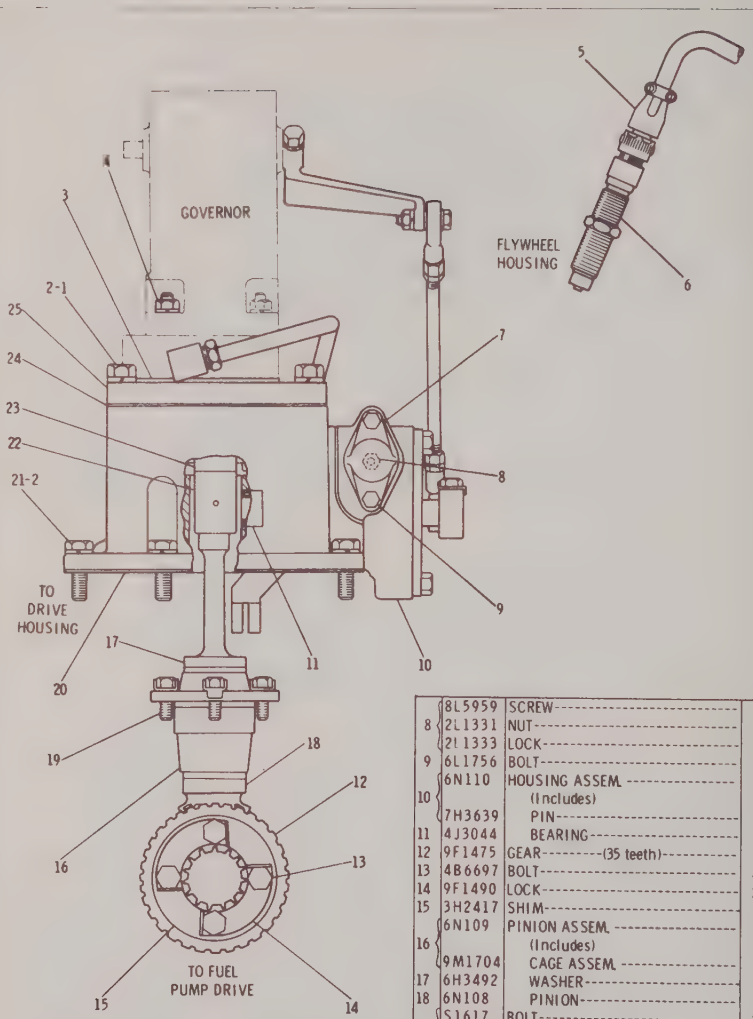
4N5403 GOVERNOR DRIVE GROUP—Part 1—Type 3
Serial No. 46B4438—Up. FOR USE WITH ELECTRIC WOODWARD GOVERNOR
Note: 4N8681 Actuator Assembly is available



REF. NO.	PART NUMBER	DESCRIPTION	QTY
C	6N7733	LEVER ASSEM.	1
1		(Includes)	
	4N6916	LEVER	1
2	2N6341	PIN-------(large)	1
	5B8075	PIN-------(small)	1
3	6H5474	RING	1
4	1K502	WASHER	1
5	2N6345	SPRING	1
6	6N7723	CLAMP	1
7	1L6939	ELBOW	1
8	4B3388	BOLT	1
9	3B4505	LOCKWASHER	6
10	5K9243	ELBOW	1
11	4N5847	TUBE ASSEM.	1
12	8L8583	ANGLE	1
13	4N5849	TUBE ASSEM.	1
14	2L6044	ADAPTER ASSEM.	1
		(Includes)	
15	9F5647	BUSHING	2
16	1H5661	BUSHING	1
17	5K9239	FITTING	1
18	5K9246	FITTING	1
19	8L9622	COVER ASSEM.	1
20	8H8678	GASKET	1
21	5H9706	BOLT------.875 in. (2.23 cm) long	2
22	5B5492	WASHER	1
23	2L6049	SHAFT	1
24	2B2695	BOLT	1
25	S1594	BOLT	6
	S292	BOLT-------(drilled head)	1
	3B4506	LOCKWASHER	7
26	6L3402	GASKET	1
27	T284	BOLT	1
	3B4504	LOCKWASHER	1
28	7H3641	ROD END	2
29	2L6052	COVER	1
30	1B4202	NUT	2
31	S1617	BOLT-------.75 in. (1.90 cm) long	2
32	1L2313	ROD	1
33	1H5514	BOLT	1
	1D4716	NUT	1
34	1F9369	TEE	1
	5M6214	PLUG	1
35	9M4136	SPACER	1

C INDICATES CHANGE 158931

4N5403 GOVERNOR DRIVE GROUP—Part 2—Type 3
Serial No. 46B4438—Up
FOR USE WITH ELECTRIC WOODWARD GOVERNOR

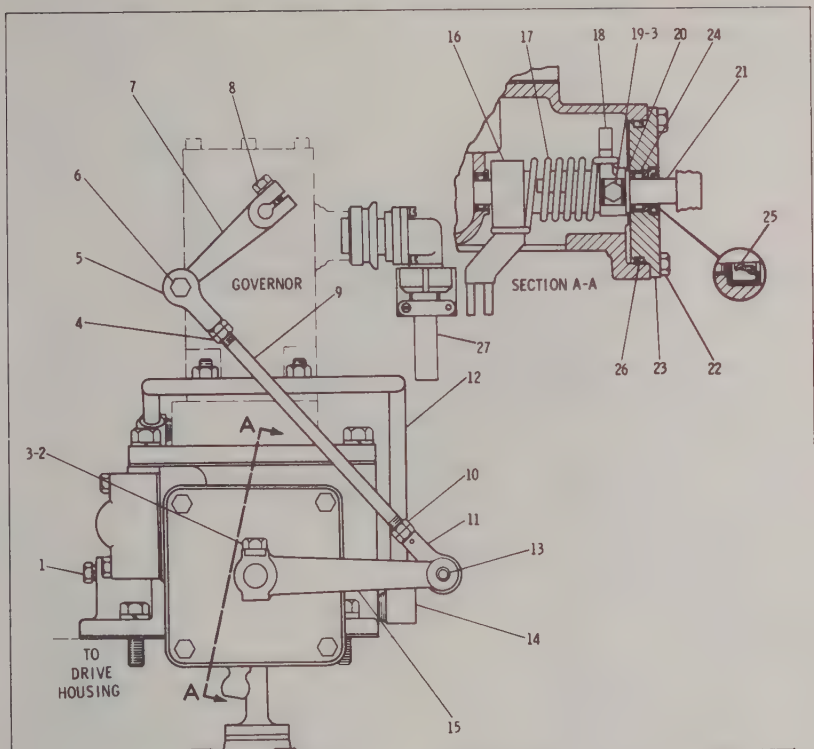


REF. NO.	PART NUMBER	DESCRIPTION	QTY
1	1A2029	BOLT	4
2	3B4506	LOCKWASHER	10
3	6N2645	GASKET	1
4	1N5946	STUD	2
	1B4202	NUT	2
	3B4505	LOCKWASHER	2
C 5	5S7433	CONNECTOR	1
6	8L4171	MAGNETIC PICK-UP ASSEM.	1
7	1N7190	COVER	1
	6L3458	GASKET	1
	8L5959	SCREW	1
8	2L1331	NUT	1
	2L1333	LOCK	1
9	6L1756	BOLT	2
10	6N110	HOUSING ASSEM. (Includes)	1
	7H3639	PIN	1
11	4J3044	BEARING	1
12	9F1475	GEAR---(35 teeth)	1
13	4B6697	BOLT	4
14	9F1490	LOCK	2
15	3H2417	SHIM	1
16	6N109	PINION ASSEM. (Includes)	1
	9M1704	CAGE ASSEM.	1
17	6H3492	WASHER	1
18	6N108	PINION	1
19	S1617	BOLT	3
	2A5328	LOCK	3
20	4N5196	GASKET	1
21	S1588	BOLT	6
22	6N159	COUPLING	1
23	4N5686	COUPLING ASSEM. (Includes)	1
	5B4685	PIN	1
24	6L3401	GASKET	1
25	5L9200	ADAPTER	1

C INDICATES CHANGE

154814

6N112 WOODWARD ELECTRIC GOVERNOR DRIVE GROUP—Part 1—Type 1
Serial No. 46B5065 to 46B6599 inclusive. Provides a governor speed of 1313 R.P.M. at an engine speed of 1200 R.P.M. Note: 6N7489 Actuator Assembly is available

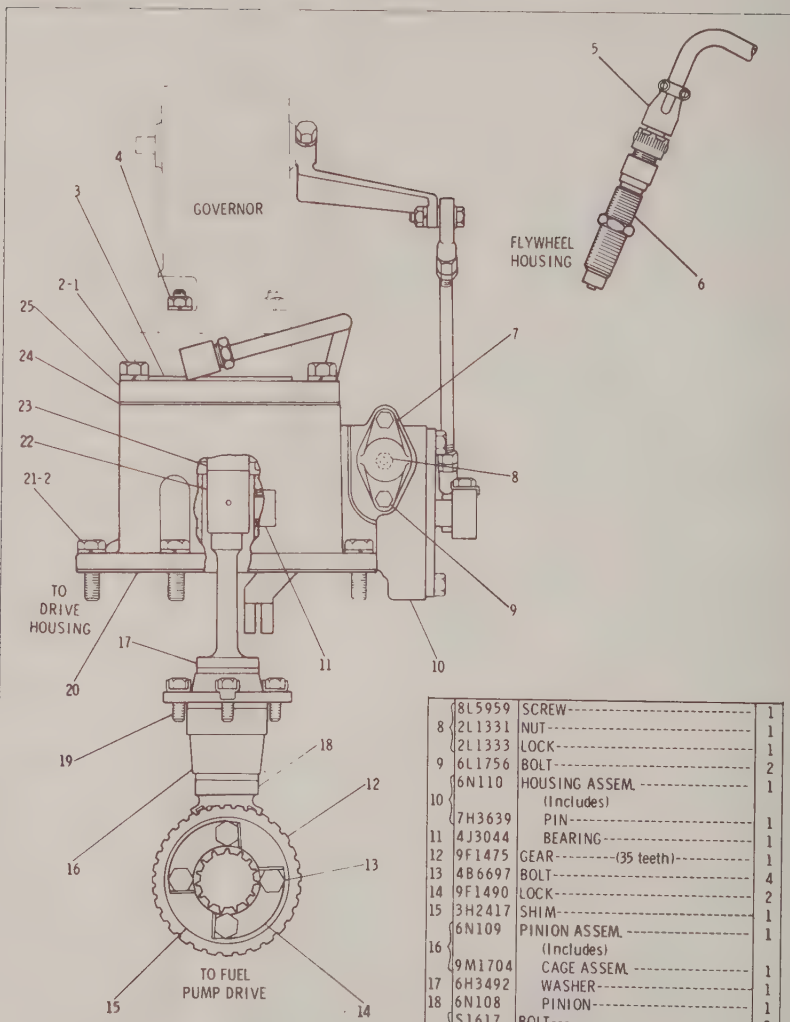


REF. NO	PART NUMBER	DESCRIPTION	QTY
1	5M6214	PLUG	1
2	1A2343	BOLT	1
3	5M7877	LOCK	2
4	4F2294	NUT	1
5	7L4186	ROD END	1
6	S1616	BOLT	1
	4L6458	NUT	1
C	3B4504	LOCKWASHER	1
7	6N36	LEVER	1
8	4F7957	BOLT	1
	3B4504	LOCKWASHER	1
	6N116	ROD ASSEM.	1
9		(Includes)	
	3L4663	ROD	1
10	4F2294	NUT	1
C 11	5P6672	ROD END	1
	4H3639	PIN	1
12	6N7	TUBE ASSEM.	1
13	2B2695	BOLT	1
	3B4505	LOCKWASHER	1
14	5K9235	ELBOW	2
15	8L5258	LEVER	1
16	6N105	LEVER	1
C 17	6N8134	SPRING	1
18	6N102	LEVER	1
19	4B9883	BOLT	1
20	6B863	WASHER	1
21	6N100	SHAFT	1
22	S1617	BOLT	4
23	6N400	COVER ASSEM.	1
		(Includes)	
24	4J3044	BEARING	1
25	8H9180	SEAL	1
26	2H6184	SEAL	1
C 27	8L8424	CONNECTOR	1

C INDICATES CHANGE

168931

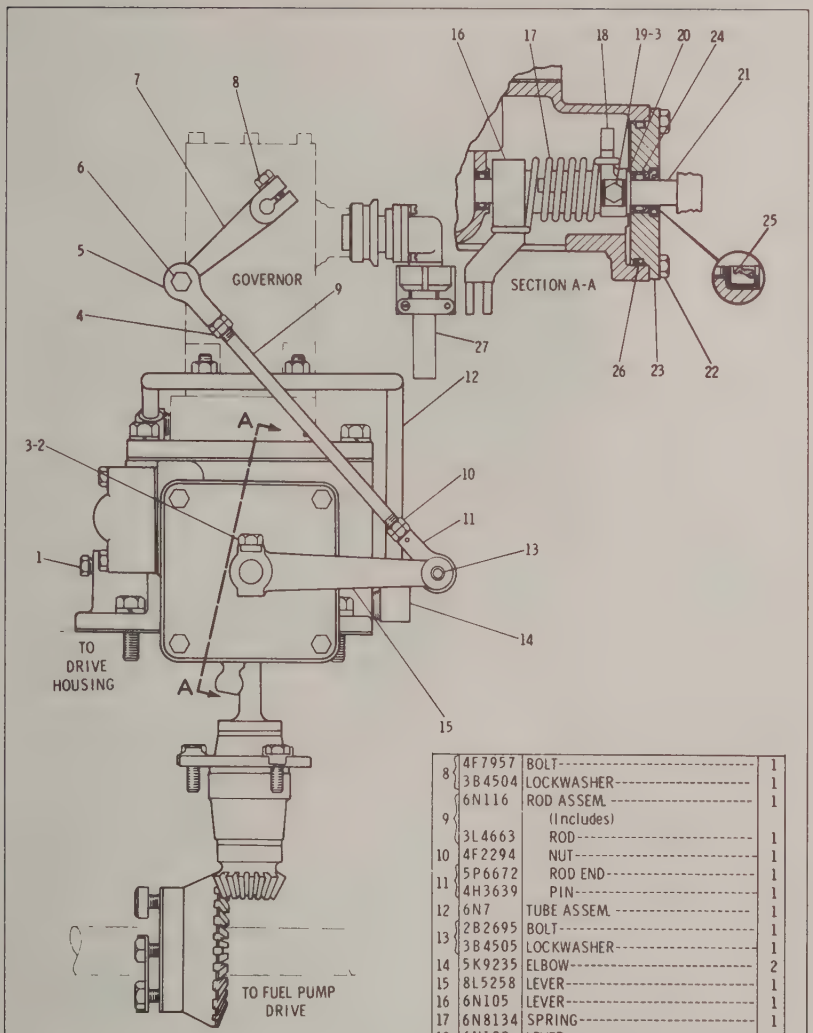
6N112 WOODWARD ELECTRIC GOVERNOR DRIVE GROUP—Part 2—Type 1
Serial No. 46B5065 to 46B6599 inclusive
Provides a governor speed 1313 R.P.M. at an engine speed of 1200 R.P.M.



REF. NO.	PART NUMBER	DESCRIPTION	QTY
1	1A2029	BOLT	4
2	3B4506	LOCKWASHER	10
3	6N2645	GASKET	1
4	1N5946	STUD	2
	1B4202	NUT	2
	3B4505	LOCKWASHER	2
5	5S7433	CONNECTOR	1
6	8L4171	MAGNETIC PICK-UP ASSEM.	1
7	1N7190	COVER	1
	6L3458	GASKET	1
	8L5959	SCREW	1
8	2L1331	NUT	1
	2L1333	LOCK	1
9	6L1756	BOLT	2
10	6N110	HOUSING ASSEM. (Includes)	1
	7H3639	PIN	1
11	4J3044	BEARING	1
12	9F1475	GEAR--(35 teeth)	1
13	4B6697	BOLT	4
14	9F1490	LOCK	2
15	3H2417	SHIM	1
16	6N109	PINION ASSEM. (Includes)	1
	9M1704	CAGE ASSEM.	1
17	6H3492	WASHER	1
18	6N108	PINION	1
19	S1617	BOLT	3
	2A5328	LOCK	3
20	4N5196	GASKET	1
21	S1588	BOLT	6
22	6N159	COUPLING	1
23	4N5686	COUPLING ASSEM. (Includes)	1
	5B4685	PIN	1
24	6L3401	GASKET	1
25	5L9200	ADAPTER	1

172251

6N112 WOODWARD ELECTRIC GOVERNOR DRIVE GROUP—Part 1—Type 2
Serial No. 46B5065 to 46B6599 inclusive. Provides a governor speed of 1313 R.P.M. at an engine speed of 1200 R.P.M. Note: 6N7489 Actuator Assembly is available



REF. NO.	PART NUMBER	DESCRIPTION	QTY
1	5M6214	PLUG	1
2	1A2343	BOLT	1
3	5M7877	LOCK	2
4	4F2294	NUT	1
5	7L4186	ROD END	1
6	S1616	BOLT	1
	4L6458	NUT	1
	3B4504	LOCKWASHER	1
C 7	8N773	LEVER	1
8	4F7957	BOLT	1
	3B4504	LOCKWASHER	1
	6N116	ROD ASSEM.	1
9		(Includes)	
	3L4663	ROD	1
10	4F2294	NUT	1
11	5P6672	ROD END	1
	4H3639	PIN	1
12	6N7	TUBE ASSEM.	1
13	2B2695	BOLT	1
	3B4505	LOCKWASHER	1
14	5K9235	ELBOW	2
15	8L5258	LEVER	1
16	6N105	LEVER	1
17	6N8134	SPRING	1
18	6N102	LEVER	1
19	4B9883	BOLT	1
20	6B863	WASHER	1
21	6N100	SHAFT	1
22	S1617	BOLT	4
23	6N400	COVER ASSEM.	1
		(Includes)	
24	4J3044	BEARING	1
25	8H9180	SEAL	1
26	2H6184	SEAL	1
27	8L8424	CONNECTOR	1

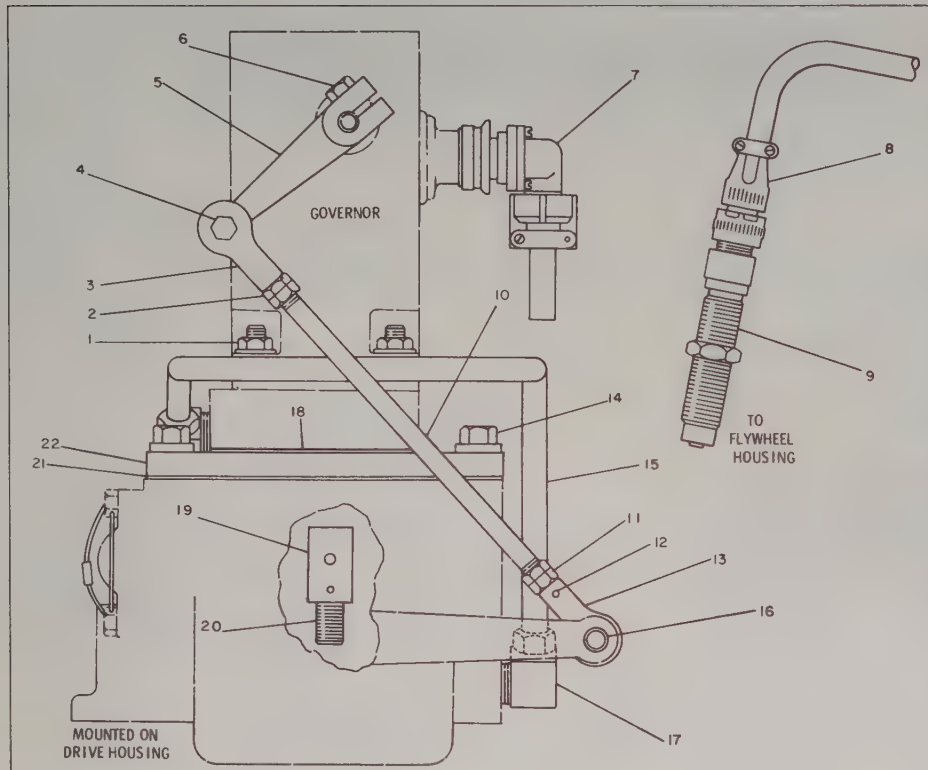
C INDICATES CHANGE 172252

6N112 WOODWARD ELECTRIC GOVERNOR DRIVE GROUP—Part 2—Type 2
Serial No. 46B5065 to 46B6599 inclusive
Provides a governor speed of 1313 R.P.M. at an engine speed of 1200 R.P.M.

8N3526 WOODWARD ELECTRIC GOVERNOR DRIVE GROUP

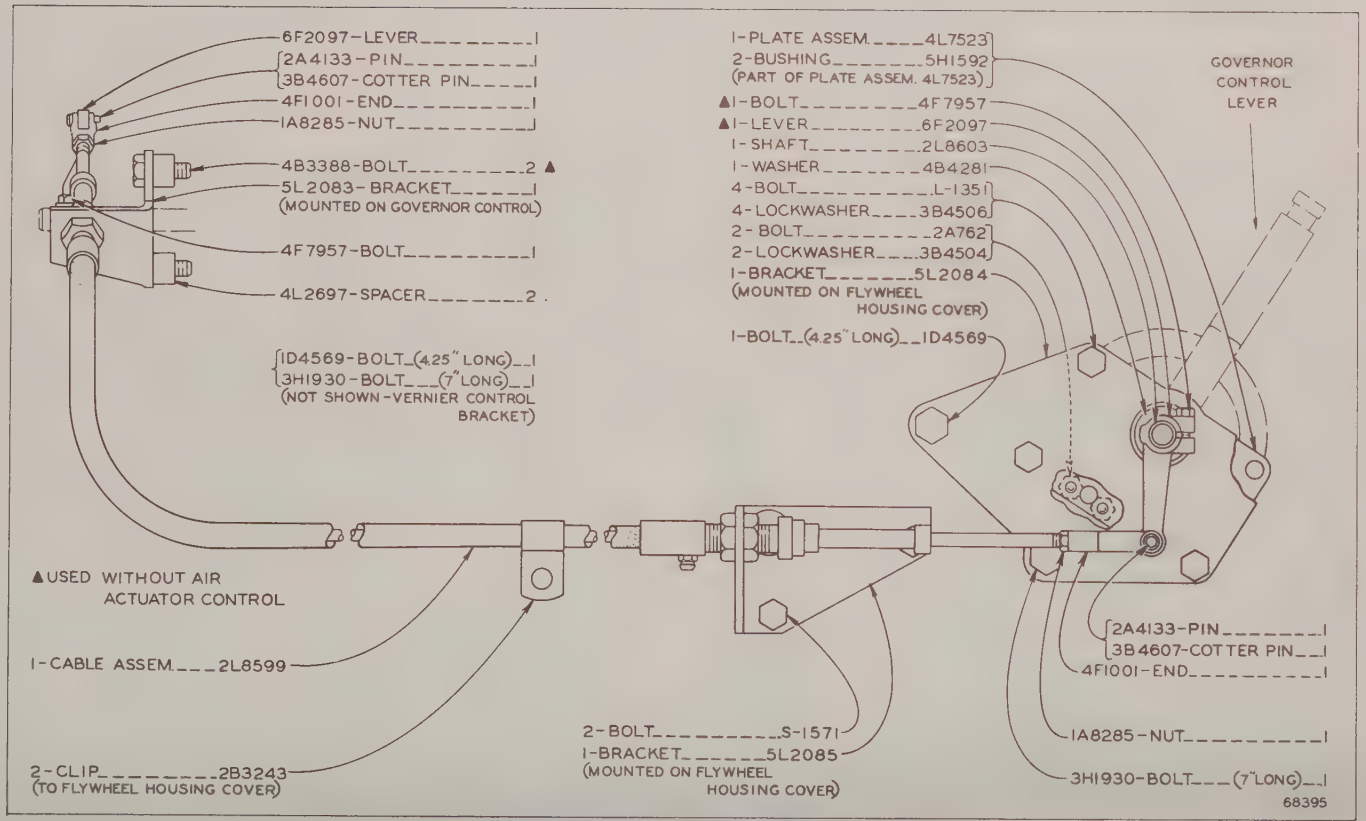
Serial No. 46B6600—Up

Note: 7N9871 Actuator is available



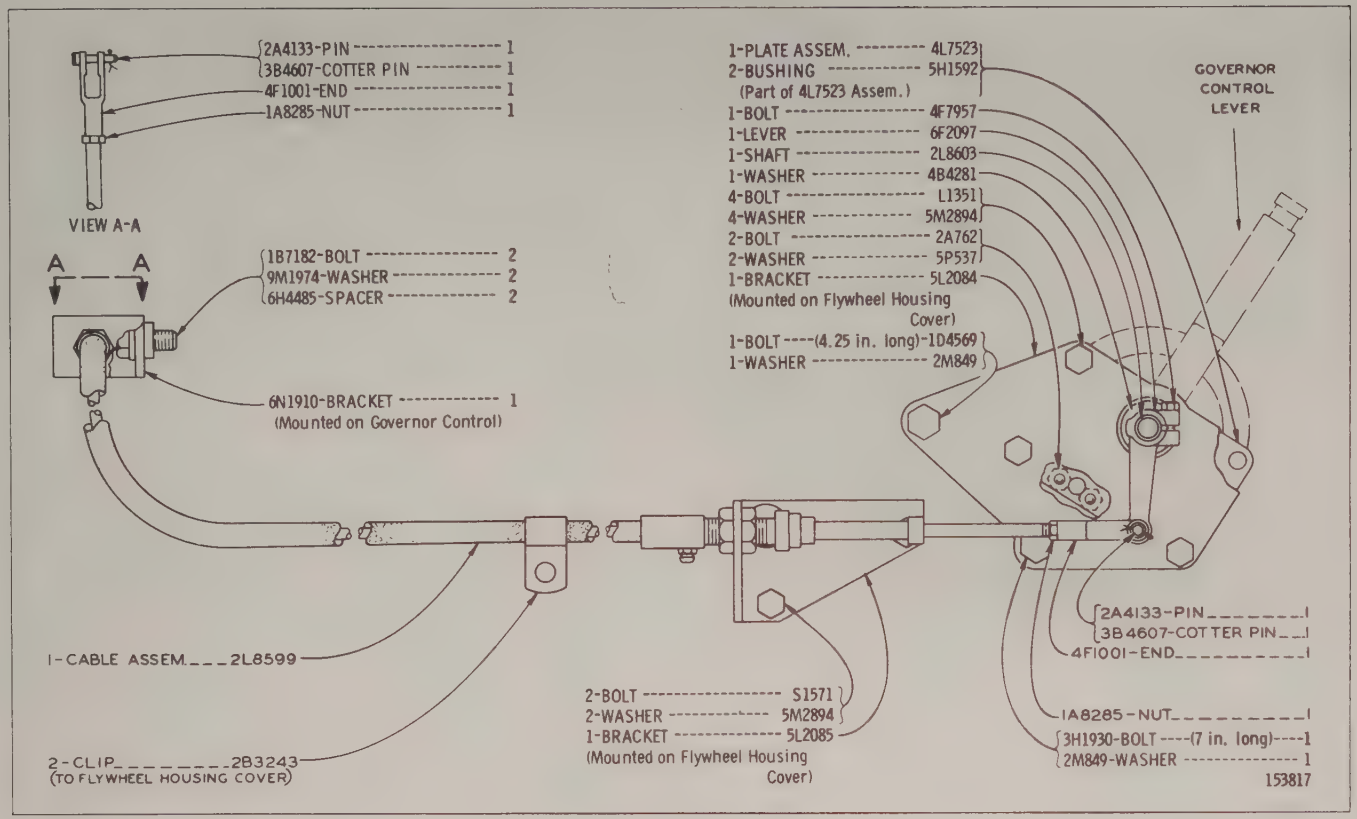
REF. NO.	PART NUMBER	DESCRIPTION	QTY.
1	1N5946	STUD	2
	1B4202	NUT	2
	9M1974	WASHER	2
2	4F2294	NUT	1
3	7L4186	ROD END	1
4	S1616	BOLT	1
	4L6458	NUT	1
5	8N773	LEVER	1
6	4F7957	BOLT	1
7	8L8424	CONNECTOR	1
8	5S7433	PLUG ASSEM.	1
9	8L4171	MAGNETIC PICK-UP ASSEM.	1
10	6N116	ROD ASSEM. (Includes)	1
	3K4663	ROD	1
11	4F2294	NUT	1
12	7H3639	PIN	1
13	5P6672	ROD END	1
14	1A2029	BOLT	4
	5M2894	WASHER	4
15	6N7	TUBE ASSEM.	1
16	2B2695	BOLT	1
17	5K9235	ELBOW	2
18	6N2645	GASKET	1
19	4N5686	COUPLING ASSEM. (Includes)	1
20	5B4685	PIN	1
21	6L3401	GASKET	1
22	5L9200	ADAPTER	1

173464

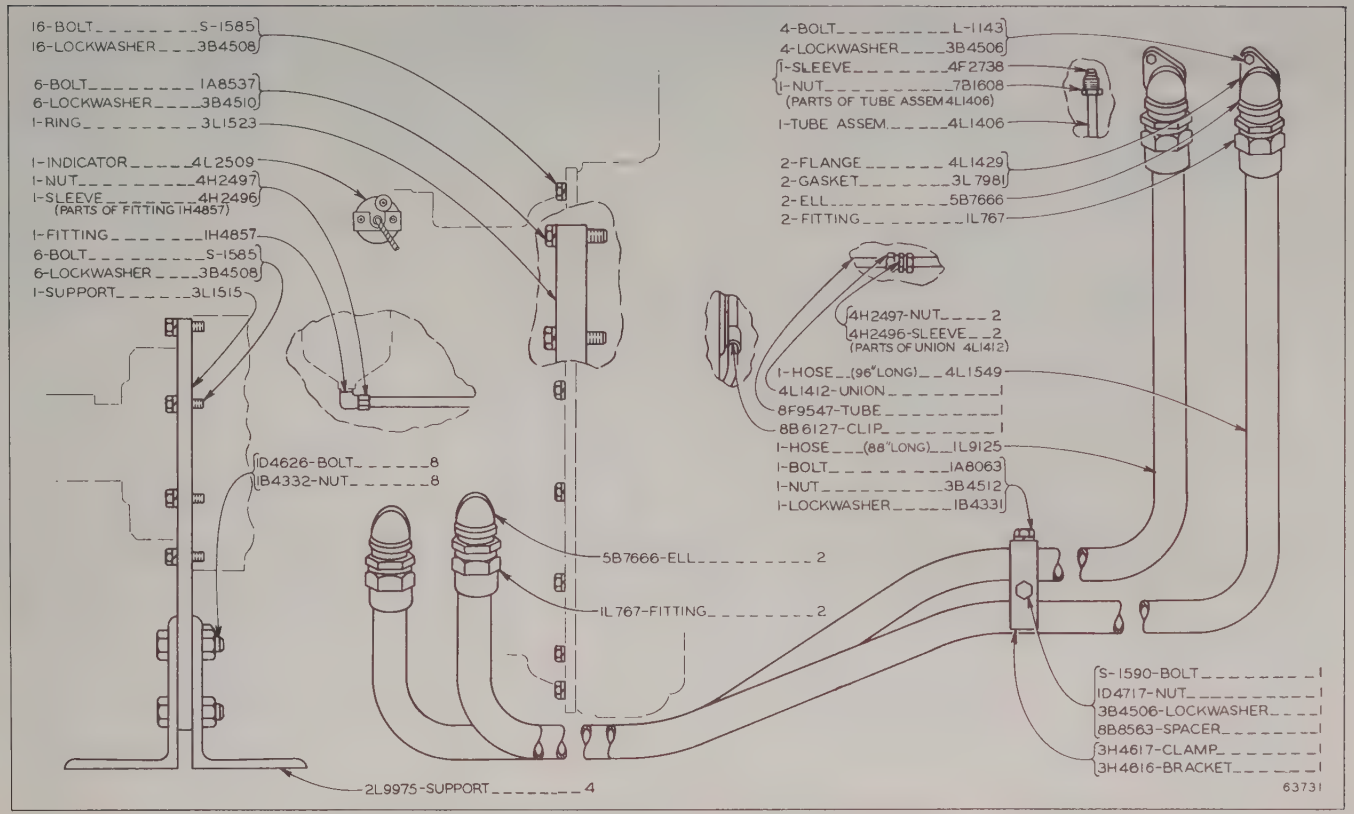


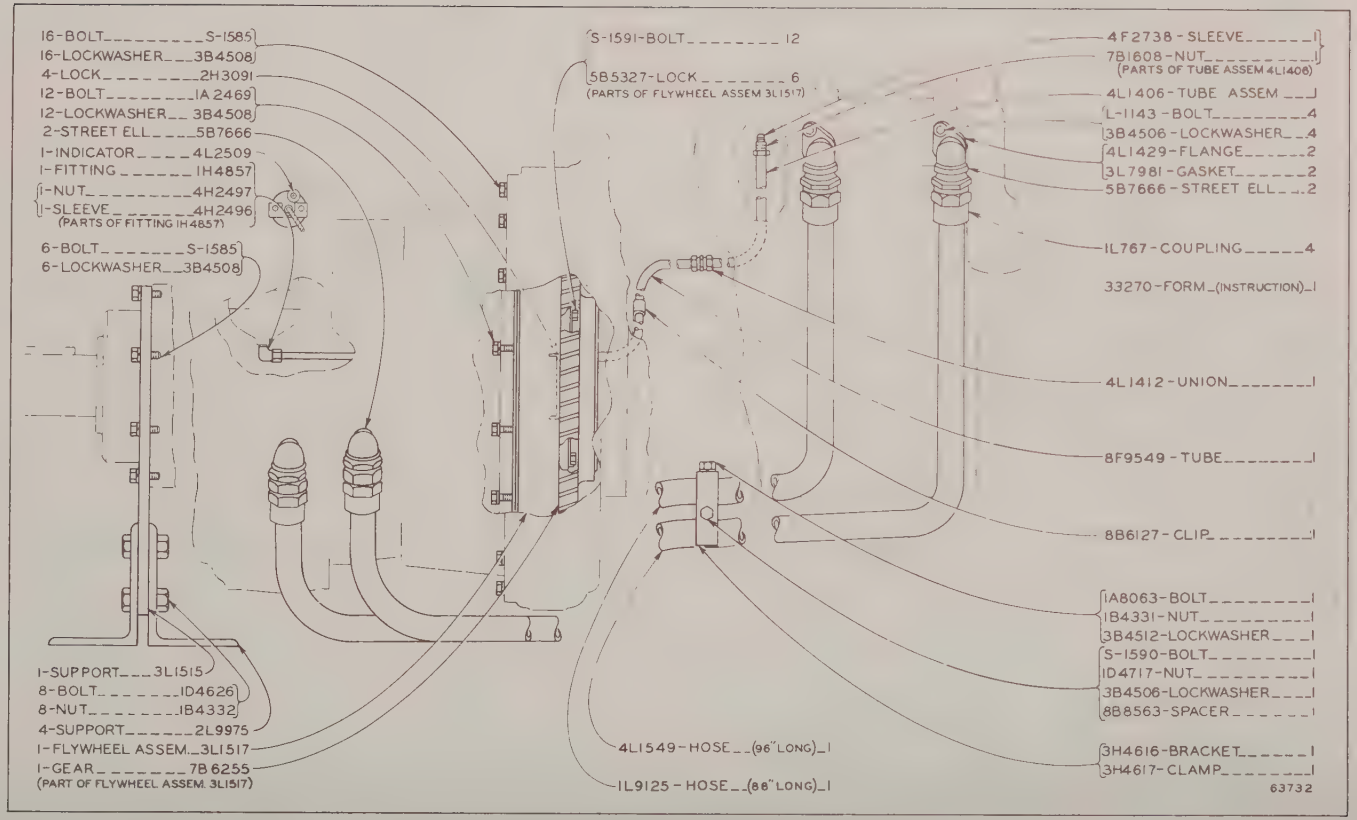
5L1605 GOVERNOR CONTROL MOUNTING GROUP—Left Hand
Serial No. 46B1558 to 46B5064 inclusive
Refer to Page 124 for usage

6N1909 GOVERNOR MOUNTING GROUP
Serial No. 46B5065—Up

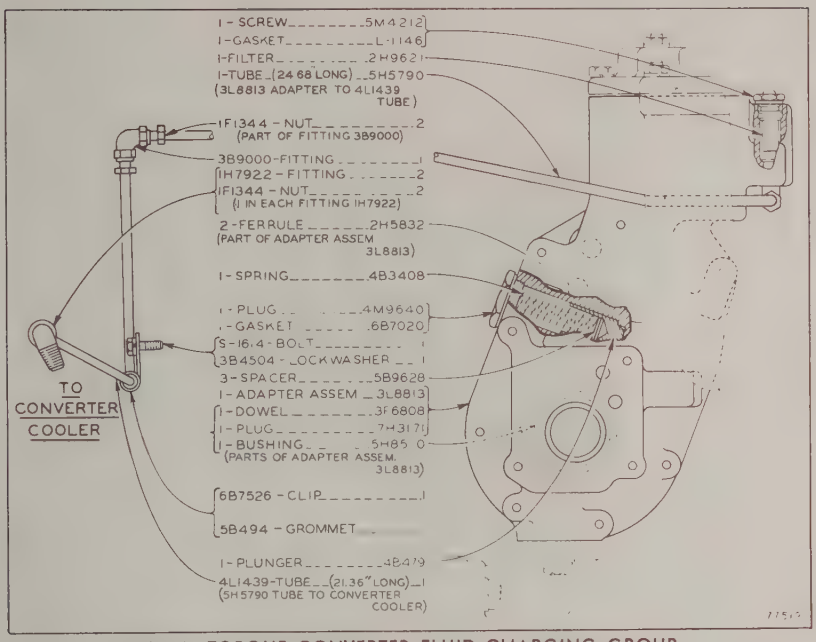


3L1521 TORQUE CONVERTER MOUNTING GROUP
FOR USE WITHOUT CUT-OFF CLUTCH

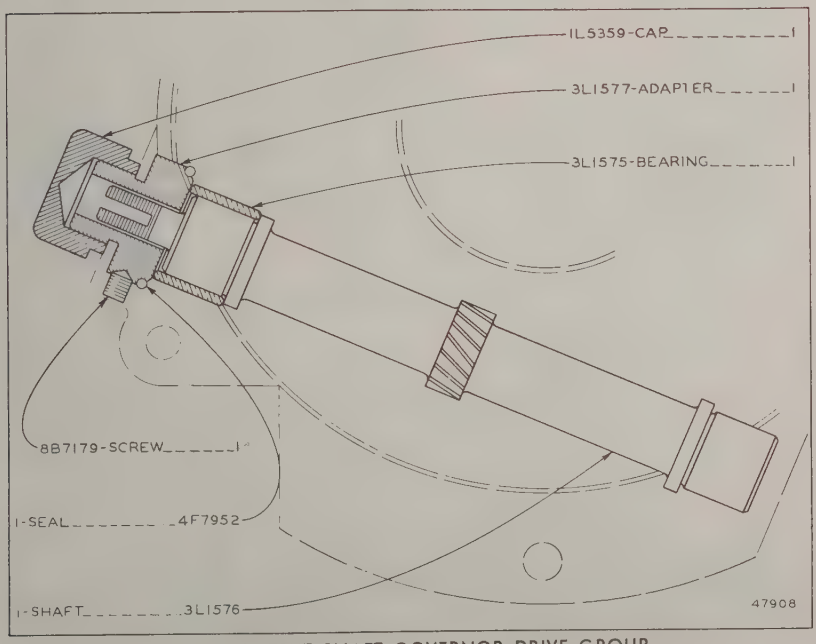




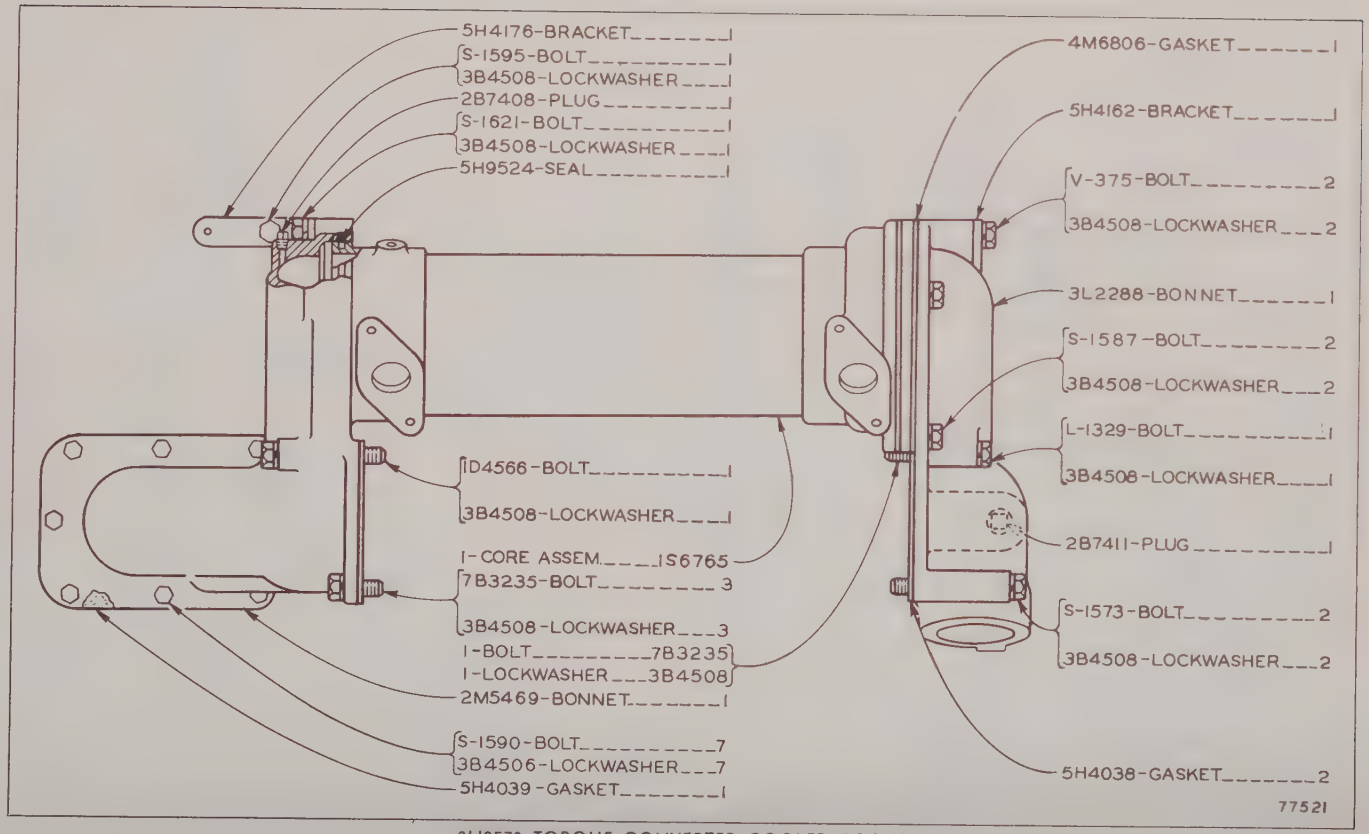
3L1522 TORQUE CONVERTER MOUNTING GROUP
FOR USE WITH CUT-OFF CLUTCH



3L2040 TORQUE CONVERTER FLUID CHARGING GROUP



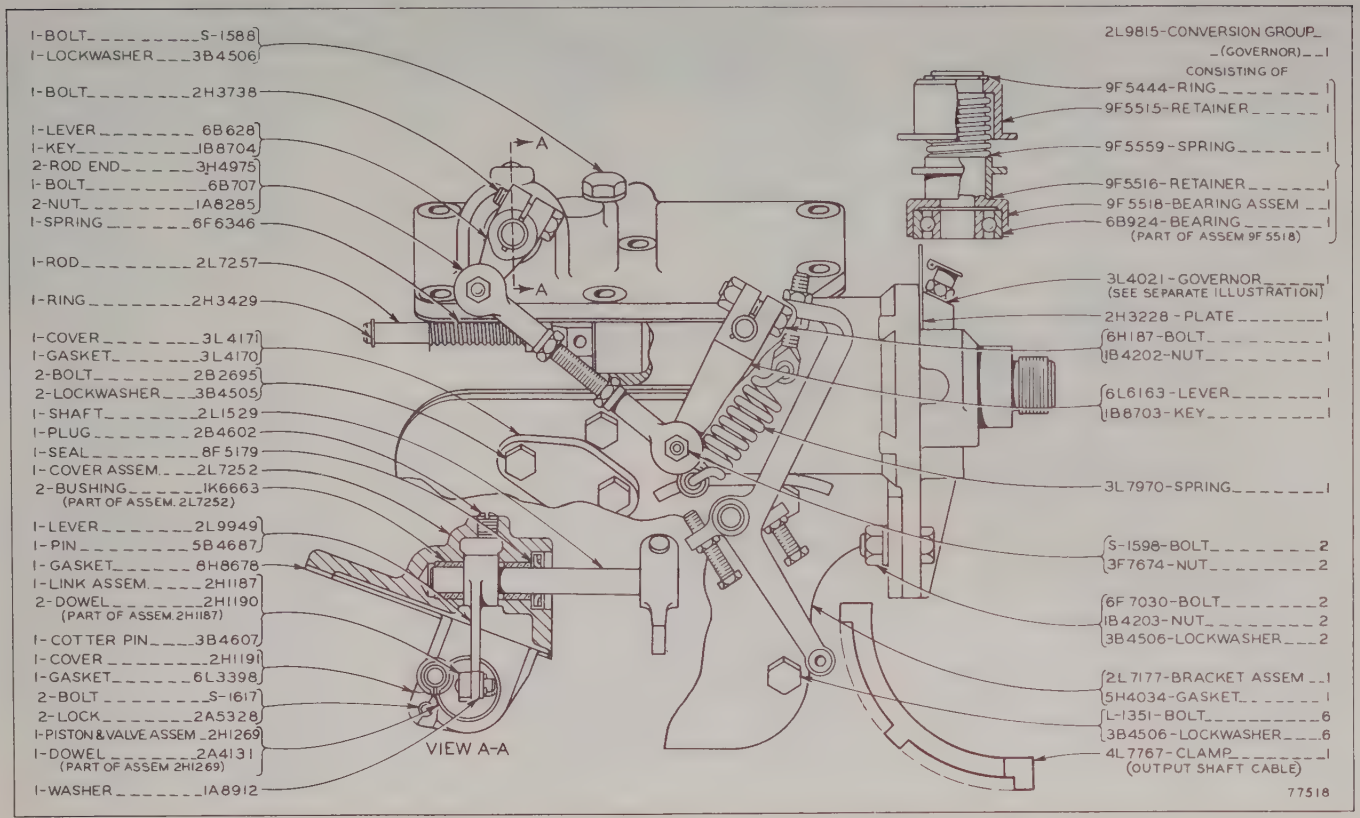
2L9793 OUTPUT SHAFT GOVERNOR DRIVE GROUP

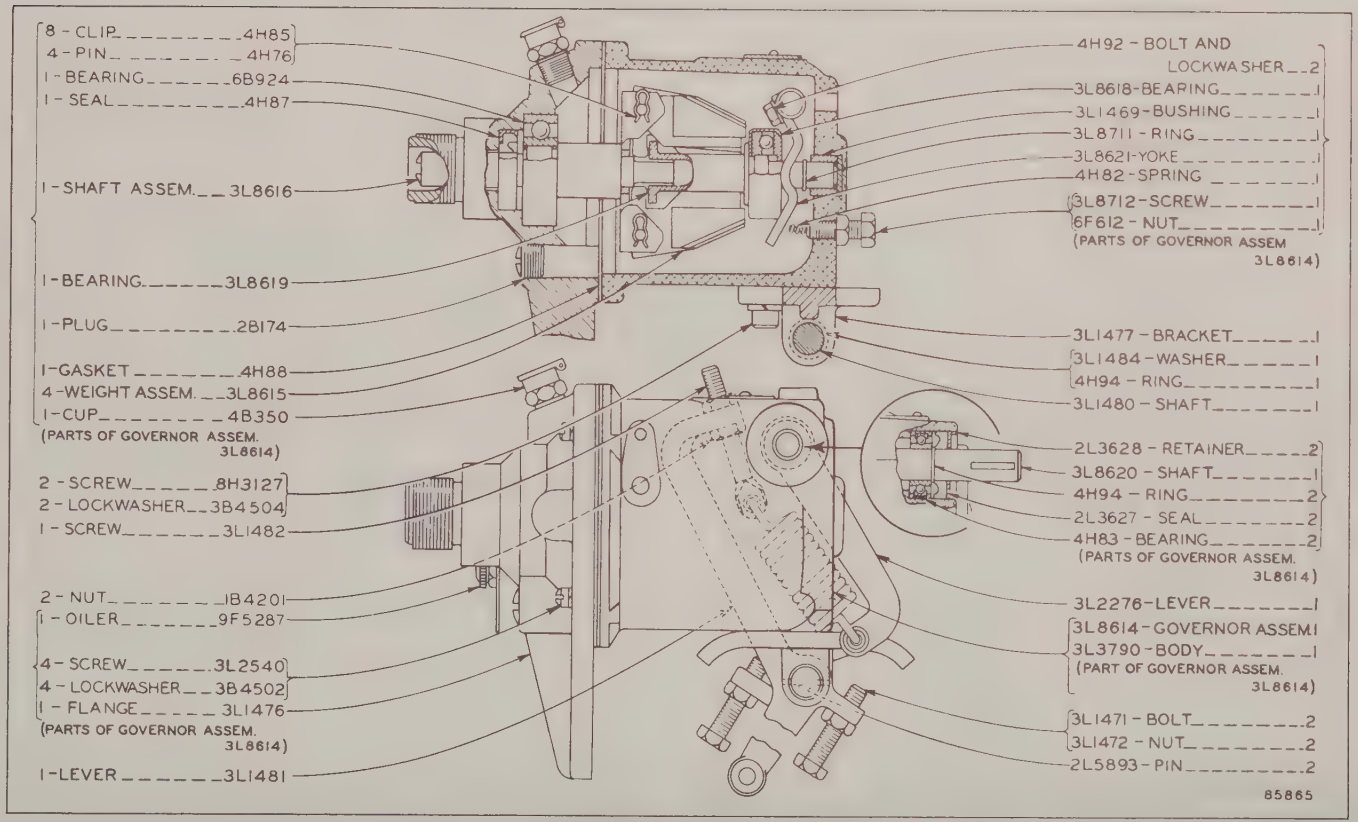


8H2570 TORQUE CONVERTER COOLER GROUP

3L4051 TORQUE CONVERTER OUTPUT SHAFT GOVERNOR GROUP

3L4021 Governor Assembly parts are shown on Page 144



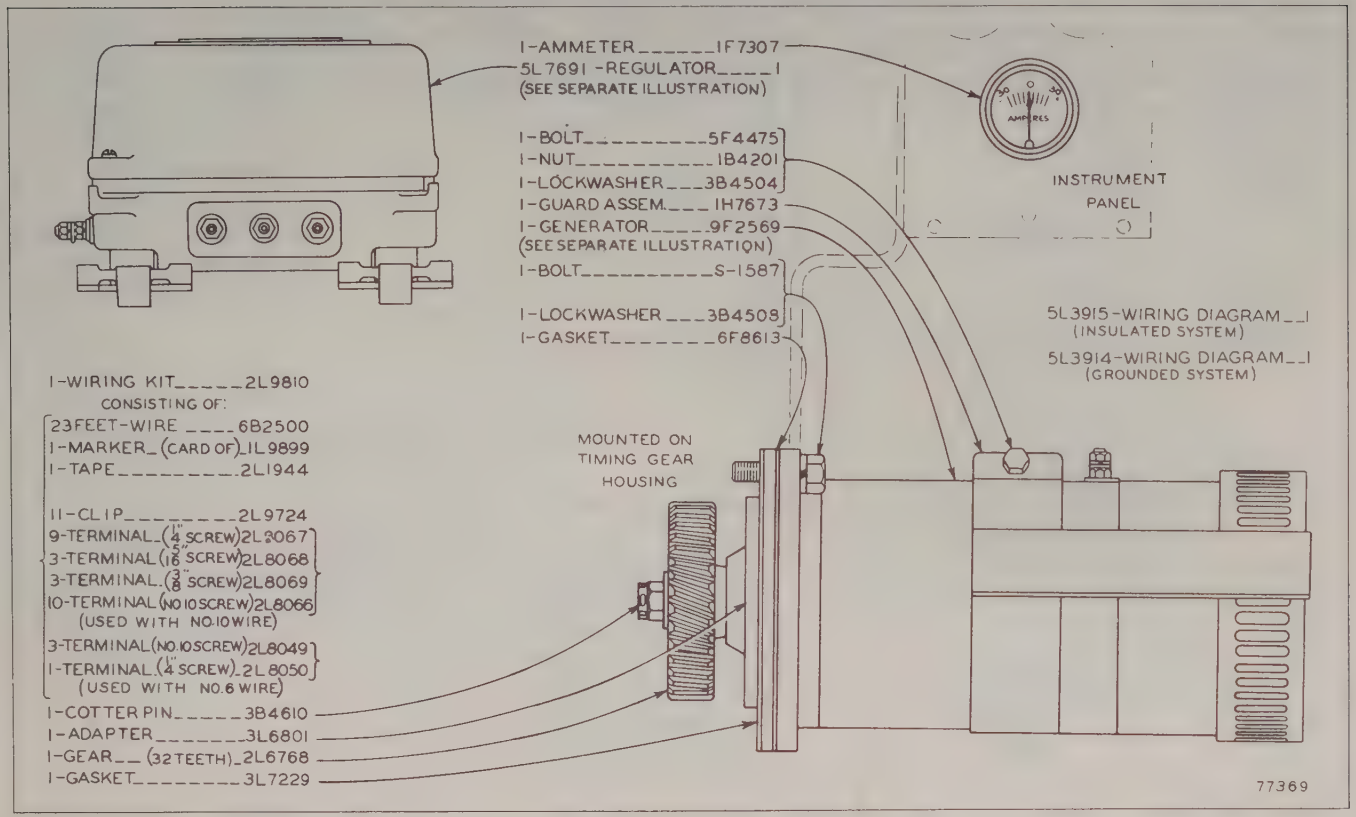


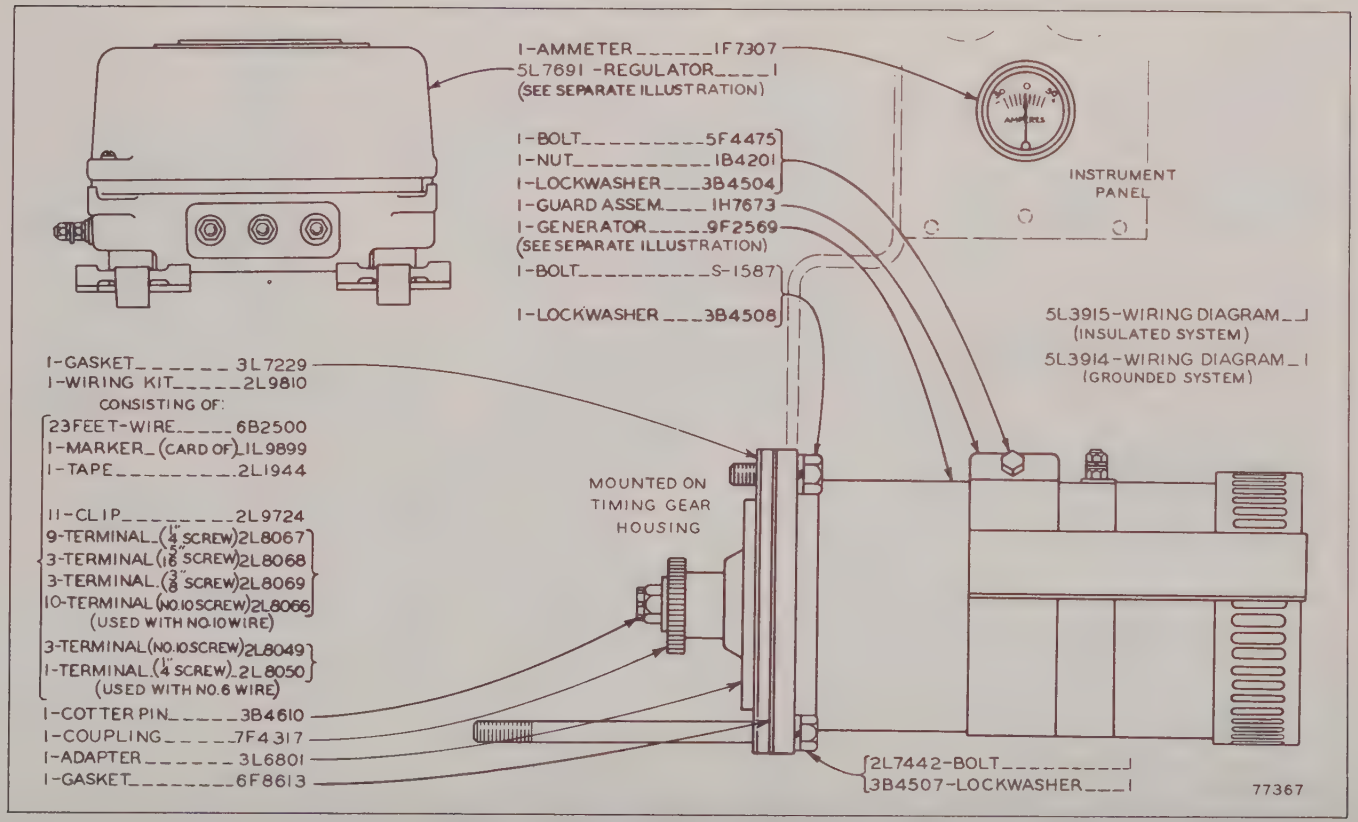
3L4021 GOVERNOR ASSEMBLY

Part of 3L4051 Torque Converter Output Shaft Governor Group shown on Page 143

2L6809 GENERATOR GROUP—32 Volt, 15 Ampere
FOR USE WITHOUT RIGHT HAND AUXILIARY DRIVE

5L7691 Regulator Assembly and 9F2569 Generator parts are shown on Pages 148 and 150



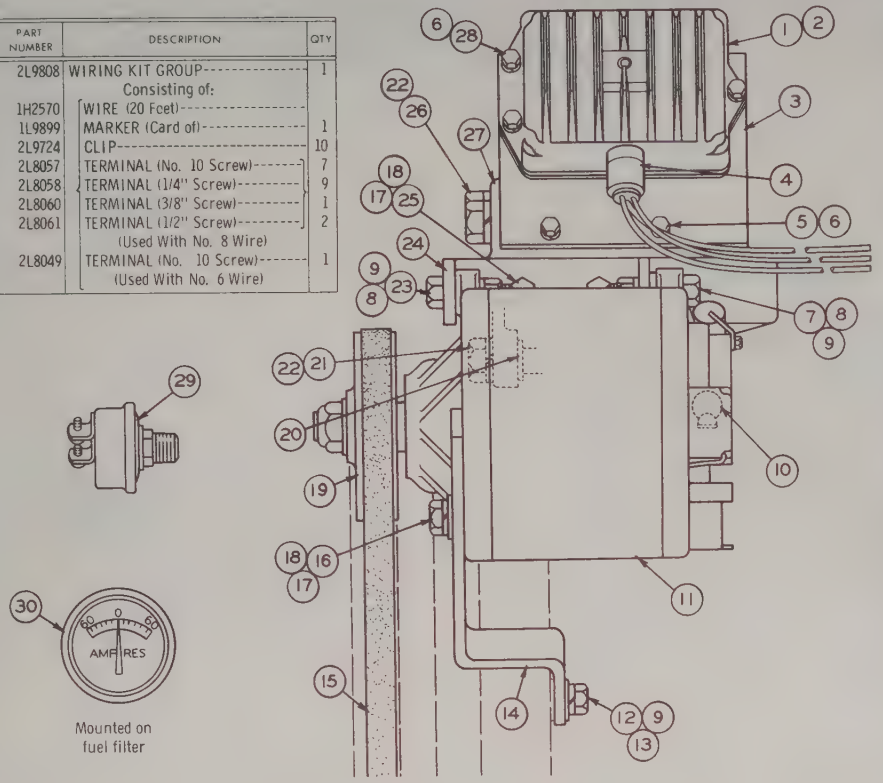


2L9399 GENERATOR GROUP—32 Volt, 15 Ampere
FOR USE WITH RIGHT HAND AUXILIARY DRIVE
5L7691 Regulator Assembly and 9F2569 Generator parts are shown on Pages 148 and 150

6L6597 ALTERNATOR GROUP—32 Volt, 45 Ampere

Serial No. 46B1856—Up and 77B131—Up. For 30 Volt application substitute 6L5658 Regulator for 6L5397 Regulator. 6L6590 Alternator, 6L5397 and 6L5658 Regulator parts are shown on Pages 146B, 146C and 146D. Only separate parts serviced. When complete Group is required order 4N8128 and 3N7684 shown on Pages 146A-1 and 146A-2

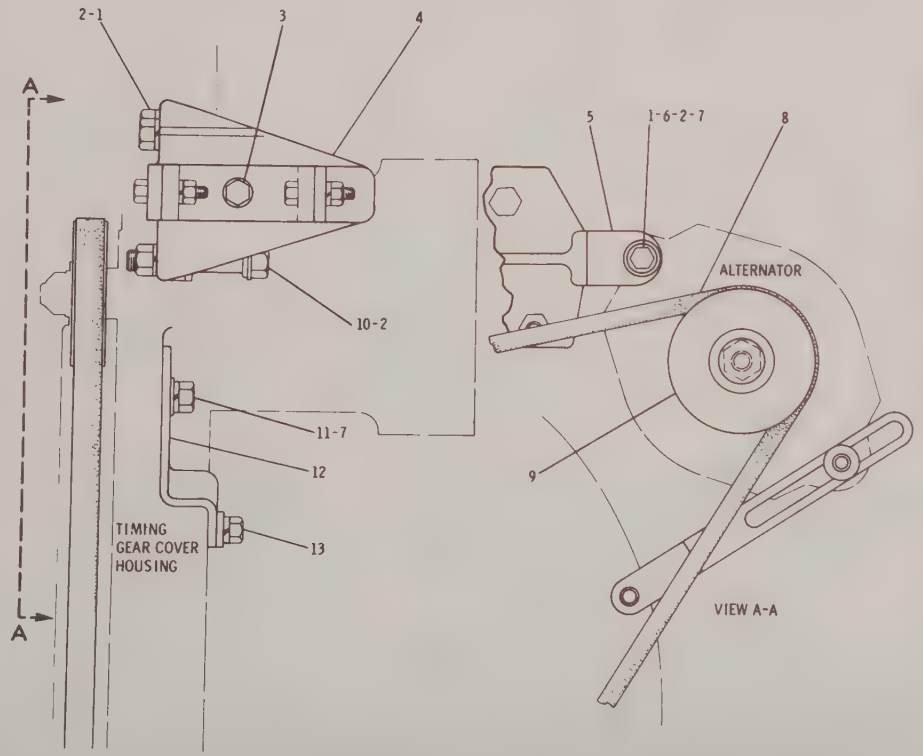
REF NO	PART NUMBER	DESCRIPTION	QTY
	2L9808	WIRING KIT GROUP	1
		Consisting of:	
	1H2570	WIRE (20 Feet)	
	1L9899	MARKER (Card of)	1
	2L9724	CLIP	10
	2L8057	TERMINAL (No. 10 Screw)	7
	2L8058	TERMINAL (1/4" Screw)	9
	2L8060	TERMINAL (3/8" Screw)	1
	2L8061	TERMINAL (1/2" Screw) (Used With No. 8 Wire)	2
	2L8049	TERMINAL (No. 10 Screw) (Used With No. 6 Wire)	1



REF NO	PART NUMBER	DESCRIPTION	QTY
1	6L5397	REGULATOR -or-	1
2	▲ 6L5658	REGULATOR (See Separate Illustration)	1
3	6L6589	PLATE	1
4	6L3484	WIRE ASSEM.	1
5	S-1615	BOLT	2
6	3B4504	LOCKWASHER	5
7	T-768	BOLT	1
8	1D4718	NUT	2
9	3B4507	LOCKWASHER	3
10	6L3483	COVER	2
11	6L6590	ALTERNATOR ASSEMBLY (See Separate Illustration)	1
12	3H5368	BOLT	1
13	4B4279	WASHER	1
14	6L6592	STRAP	1
15	8M1715	VEE BELT	1
16	S-1594	BOLT	1
17	3B4506	LOCKWASHER	3
18	4B4278	WASHER	3
19	6L6593	PULLEY	1
20	4F5675	SEAL	1
21	L-1732	BOLT	1
22	3B4508	LOCKWASHER	3
23	T-772	BOLT	1
24	9L2040	BAR	1
25	L-1351	BOLT	2
26	2B947	BOLT	2
27	6L6594	BRACKET	1
28	S-1616	BOLT	3
29	2L3402	SWITCH (Fuel Pressure)	1
30	8M7892	AMMETER	1
	5L3922	WIRING DIAGRAM	1

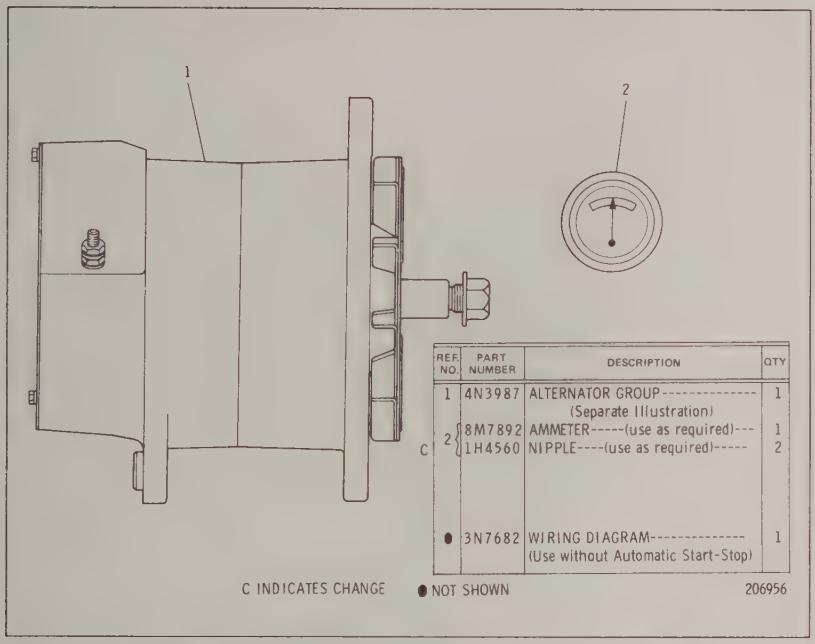
▲ NOT PART OF ALTERNATOR GROUP 6L6597

94688



REF. NO.	PART NUMBER	DESCRIPTION	QTY
1	2B947	BOLT	4
2	3B4508	LOCKWASHER	5
3	S1594	BOLT	2
	5M2894	WASHER	2
4	6L6594	BRACKET	1
5	3N5679	BRACKET ASSEM.	1
6	1D4719	NUT	2
7	2M849	WASHER	3
8	2N8947	VEE BELT	1
9	4N6885	PULLEY	1
10	L1558	BOLT	1
	1B4205	NUT	1
	4F5675	SEAL	1
	9B1006	WASHER	1
11	6H1717	BOLT	1
12	3N5675	STRAP	1
13	4F8965	BOLT	1
	3B4507	LOCKWASHER	1
	4S9191	WASHER	1

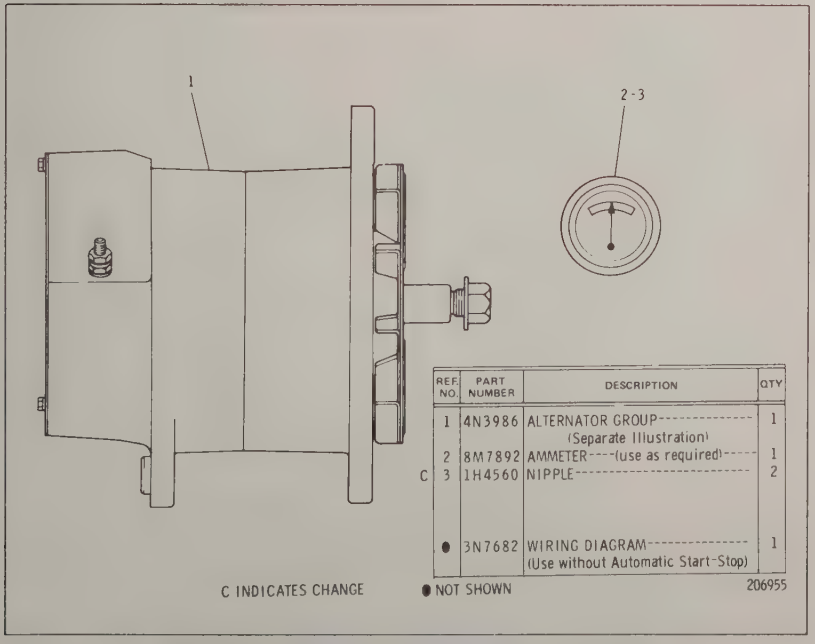
4N8128 ALTERNATOR MOUNTING GROUP
Serial No. 46B1856—Up
FOR USE WITH DELCO-REMY 24 VOLT AND 32 VOLT, 50 AMPERE 25 SI ALTERNATORS



	REF. NO.	PART NUMBER	DESCRIPTION	QTY
	1	4N3987	ALTERNATOR GROUP---------- (Separate Illustration)	1
C	2	8M7892	AMMETER-----(use as required)---	1
C	2	1H4560	NIPPLE----(use as required)-----	2
●		3N7682	WIRING DIAGRAM---------- (Use without Automatic Start-Stop)	1

C INDICATES CHANGE ● NOT SHOWN 206956

3N7684 ALTERNATOR GROUP—30 or 32 Volt, 60 Ampere
Serial No. 46B1856—Up
4N3987 Alternator parts are shown on Pages 146A-5 and 146A-6



	REF. NO.	PART NUMBER	DESCRIPTION	QTY
	1	4N3986	ALTERNATOR GROUP---------- (Separate Illustration)	1
	2	8M7892	AMMETER----(use as required)-----	1
C	3	1H4560	NIPPLE----------	2
●		3N7682	WIRING DIAGRAM---------- (Use without Automatic Start-Stop)	1

C INDICATES CHANGE ● NOT SHOWN 206955

3N7683 ALTERNATOR GROUP—24 Volt, 60 Ampere
Serial No. 46B1856—Up
4N3986 Alternator parts are shown on Pages 146A-7 and 146A-8

	Consists of:		Page
1	1N9406	Alternator Group	146A-9
1	.....	Wiring Diagram--Insulated System	
1	.....	Wiring Diagram--Grounded System	

4N7079 ALTERNATOR GROUP—30 or 32 Volt, 50 Ampere
Serial No. 46B1856—Up
FOR USE WITH ALTERNATOR MOUNTING GROUP

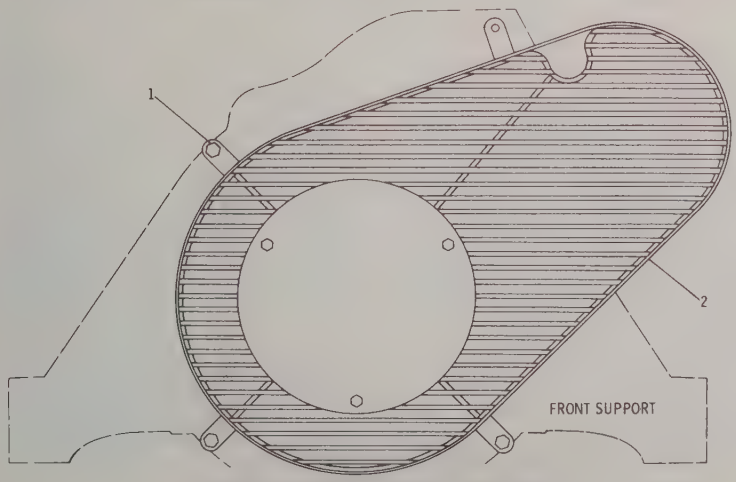
	Consists of:		Page
1	5S9088	Alternator Assembly	146A-11
1	.....	Wiring Diagram--Insulated System	
1	.....	Wiring Diagram--Grounded System	

4N7078 ALTERNATOR GROUP—24 Volt, 50 Ampere
Serial No. 46B1856—Up
FOR USE WITH ALTERNATOR MOUNTING GROUP

CONSISTS OF:

			PAGE
1	4N3986	ALTERNATOR GROUP	146A-7
1	.....	PRINT OF WIRING DIAGRAM	

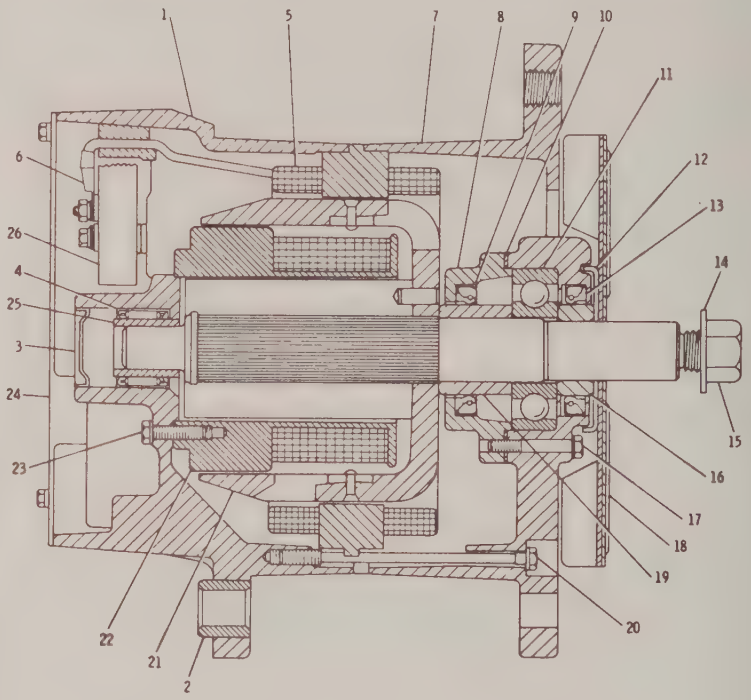
4N6300 ALTERNATOR GROUP—24 Volt, 60 Ampere



REF. NO	PART NUMBER	DESCRIPTION	QTY
1	3L526	BOLT	3
	3B4507	LOCKWASHER	3
2	4N8151	GUARD ASSEM.	1

153818

4N8152 ALTERNATOR GUARD GROUP
Serial No. 46B1856—Up. FOR USE WITH DELCO-REMY 24 VOLT OR 32 VOLT, 50 AMPERE, 25SI ALTERNATORS



REF NO	PART NUMBER	DESCRIPTION	QTY
1	6N1876	HOUSING ASSEM. (Includes)	1
2	9S2396	BUSHING	1
3	9N943	PLUG	1
4	5P3418	BEARING	1
5	6N1968	STATOR ASSEM. (Includes)	1
6	9S2014	TERMINAL	3
	9N939	GROMMET	1
C 7	2P5616	FRAME	1
8	9S2390	RETAINER ASSEM. (Includes)	1
9	9S2391	SEAL	1
10	9S2256	GASKET	1
11	2F5721	BEARING	1
12	9S2252	SLINGER	1
13	9S2391	SEAL	1
14	7F7621	WASHER	1
15	2K4821	NUT	1
16	9S2254	COLLAR	1
17	9S2008	SCREW	4
18	9S2258	FAN	1
19	9S2261	COLLAR	1
20	9S2009	BOLT	4
21	9S2302	ROTOR ASSEM.	1
C 22	3T4278	FIELD COIL	1
C 23	9S2007	SCREW	5
24	9N942	PLATE	1
25	5P3419	RACE	1
26	9N937	RECTIFIER ASSEM.	1

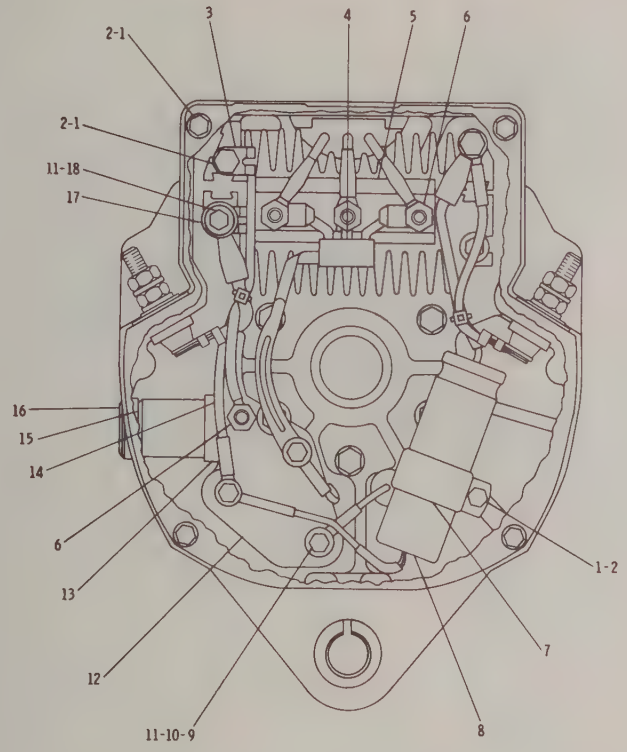
THE FOLLOWING REPAIR KITS ARE AVAILABLE:

C	6N1875	KIT----------(terminal)---------- (Includes Terminal and Lead, Bushing, Washers, Nuts and Lockwashers)	1

C INDICATES CHANGE

235473

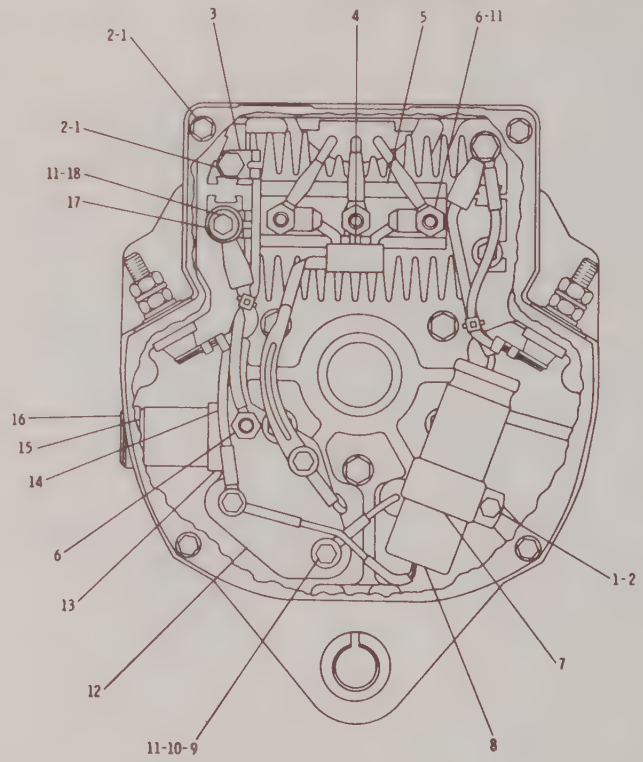
4N3987 ALTERNATOR GROUP—32 Volt, 60 Ampere—Side View
Serial No. 46B1856—Up
Part of 3N7684 Alternator Group shown on Page 146A-2



REF. NO.	PART NUMBER	DESCRIPTION	QTY
1	9S2544	SCREW	7
2	8H878	LOCKWASHER	7
3	6N1871	LEAD ASSEM.	1
4	6N1944	DIODE ASSEM.	1
5	9N941	INSULATOR	2
6	6N1869	NUT ASSEM.	4
7	6N1925	BRACKET	1
8	6N1946	CAPACITOR	1
9	6N1872	SCREW ASSEM.	3
10	9N938	WASHER	3
11	3H240	WASHER	5
12	6N1874	REGULATOR ASSEM.	1
13	9N940	BOOT	1
14	6N1873	LEAD ASSEM.	1
15	6N1877	CONNECTOR	1
16	9L6771	CAP	1
17	8M6701	WASHER	3
	6N1856	BUSHING	4
18	6N1870	SCREW ASSEM.	2

202837

4N3987 ALTERNATOR GROUP—32 Volt, 60 Ampere—End View
Serial No. 46B1856—Up
Part of 3N7684 Alternator Group shown on Page 146A-2

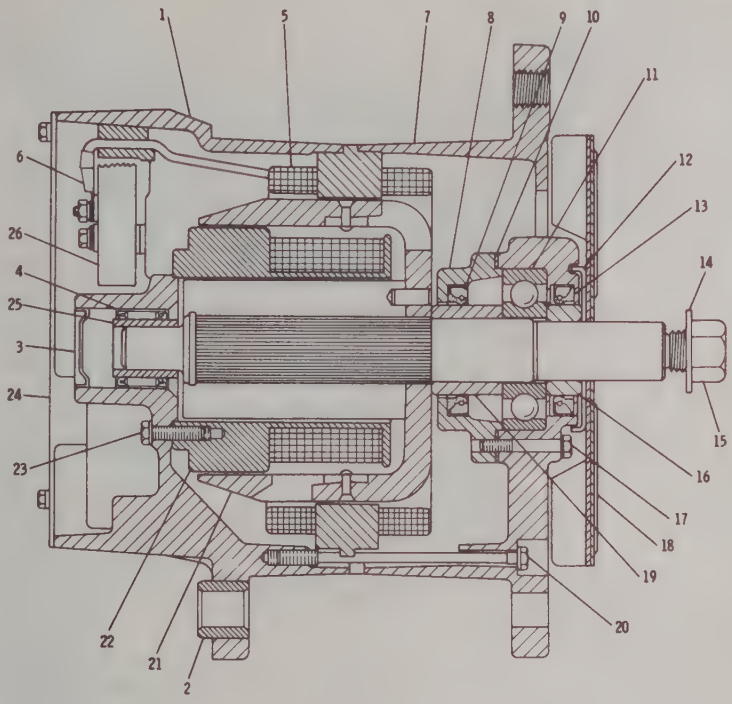


REF. NO.	PART NUMBER	DESCRIPTION	QTY
1	9S2544	SCREW	7
2	8H878	LOCKWASHER	7
3	6N1871	LEAD ASSEM.	1
4	6N1944	DIODE ASSEM.	1
5	9N941	INSULATOR	2
6	6N1869	NUT ASSEM.	4
7	6N1925	BRACKET	1
8	6N1946	CAPACITOR	1
9	6N1872	SCREW ASSEM.	3
10	9N938	WASHER--- .062 in. (1.57 mm)thick	3
11	3H240	WASHER--- .031 in. (.79 mm) thick	5
C 12	3T6354	REGULATOR ASSEM.	1
13	9N940	BOOT	1
14	6N1873	LEAD ASSEM.	1
15	9L6772	CONNECTOR	1
16	9L6771	CAP	1
17	8M6701	WASHER	3
	6N1856	BUSHING	4
18	6N1870	SCREW ASSEM.	2

C INDICATES CHANGE

235492

4N3986 ALTERNATOR GROUP—24 Volt, 60 Ampere—End View
Serial No. 46B1856—Up
Part of 3N7683 Alternator Group shown on Page 146A-2



REF. NO.	PART NUMBER	DESCRIPTION	QTY
1	6N1876	HOUSING ASSEM. (Includes)	1
2	9S2396	BUSHING	1
3	9N943	PLUG	1
4	5P3418	BEARING	1
5	6N1968	STATOR ASSEM. (Includes)	1
6	9S2014	TERMINAL	3
	9N939	GROMMET	1
7	2P5616	FRAME	1
8	9S2390	RETAINER ASSEM. (Includes)	1
9	9S2391	SEAL	1
10	9S2256	GASKET	1
11	2F5721	BEARING	1
12	9S2252	SLINGER	1
13	9S2391	SEAL	1
14	7F7621	WASHER	1
15	2K4821	NUT	1
16	9S2254	COLLAR	1
17	9S2008	SCREW	4
18	9S2258	FAN	1
19	9S2261	COLLAR	1
20	9S2009	BOLT	4
21	9S2302	ROTOR ASSEM.	1
22	6N1945	FIELD COIL	1
C 23	9S2007	SCREW	5
24	9N942	PLATE	1
25	5P3419	RACE	1
26	9N937	RECTIFIER ASSEM.	1

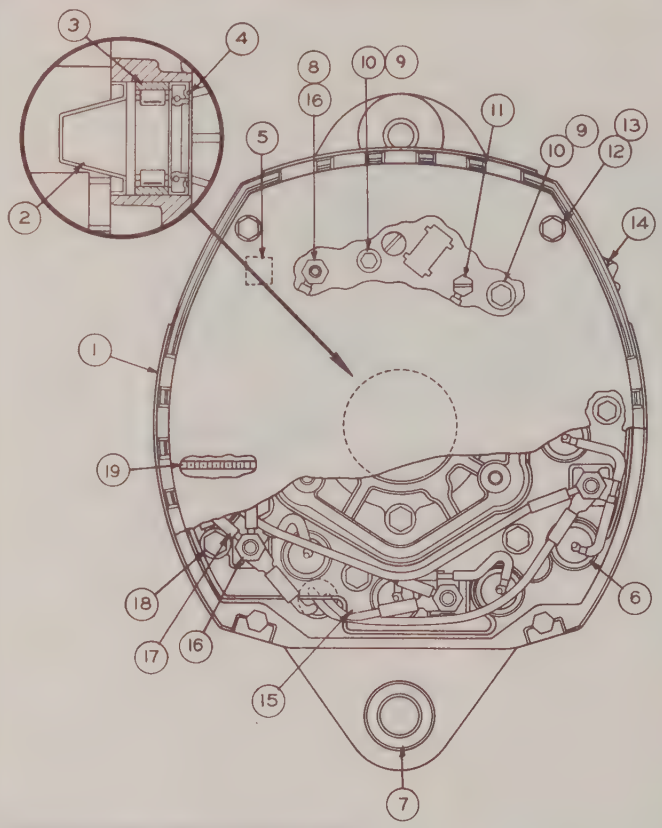
THE FOLLOWING REPAIR KITS ARE AVAILABLE:

C	6N1875	KIT-----(terminal)----- (Includes Terminal and Load, Bushing, Washers, Nuts and Lockwashers)	1

C INDICATES CHANGE

204412

4N3986 ALTERNATOR GROUP—24 Volt, 60 Ampere—Side View
Serial No. 46B1856—Up
Part of 3N7683 Alternator Group shown on Page 146A-2



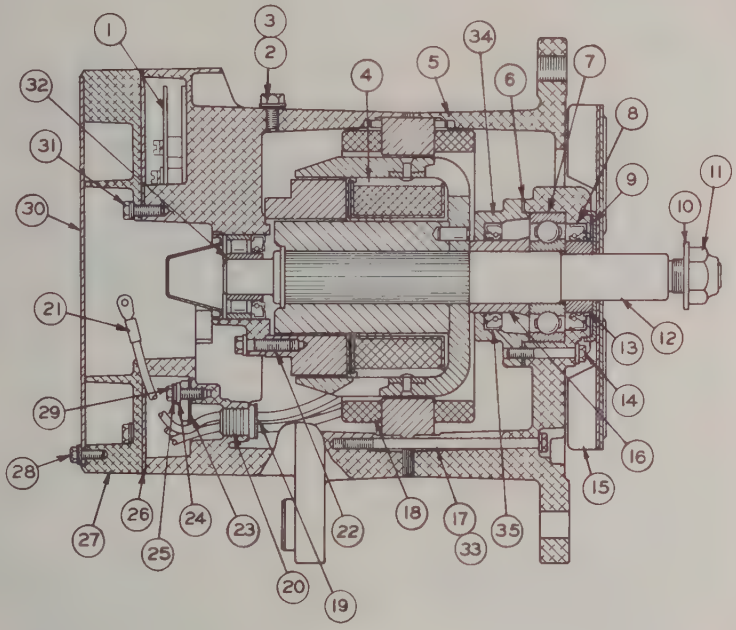
REF. NO.	PART NUMBER	DESCRIPTION	QTY
1	9S2398	HOUSING ASSEM.	1
2	9S2397	COVER	1
3	9S2395	BEARING	1
4	9S2394	SEAL	1
5	9F2247	PLUG	1
6	9S2393	DIODE	3
7	9S2396	BUSHING (Parts of 9S2398 Assem.)	1
8	9B7233	LOCKWASHER	1
9	8F1326	WASHER	2
10	9S9830	BOLT	2
	8H878	LOCKWASHER	2
11	9S9829	SCREW ASSEM.	1
12	9S2438	SCREW	2
13	7H2079	LOCKWASHER	2
14	9S2389	STUD ASSEM.	1

▲ NOT PART OF 1N9406 ALTERNATOR ASSEM.

15	9S2292	HEAT SINK ASSEM.	1
16	4B2043	NUT	4
17	9S2246	LEAD ASSEM.	1
18	9S2542	SCREW	1
19	9S2250	GROMMET	1
▲	9S2013	KIT--------(Terminal Relay)------- (Consists of such parts as Bushing, "O" Ring and Hardware)	1
▲	9S2012	KIT------(Terminal Output)------- (Consists of such parts as Gaskets, Terminal, and Hardware)	1
▲	9S2290	KIT--------(For Heat Sink)-------- (Diode Junction Hardware)	1
▲	9S2291	KIT--------(For Heat Sink)-------- (Positive Diode Heat Sink Hardware)	1

111885

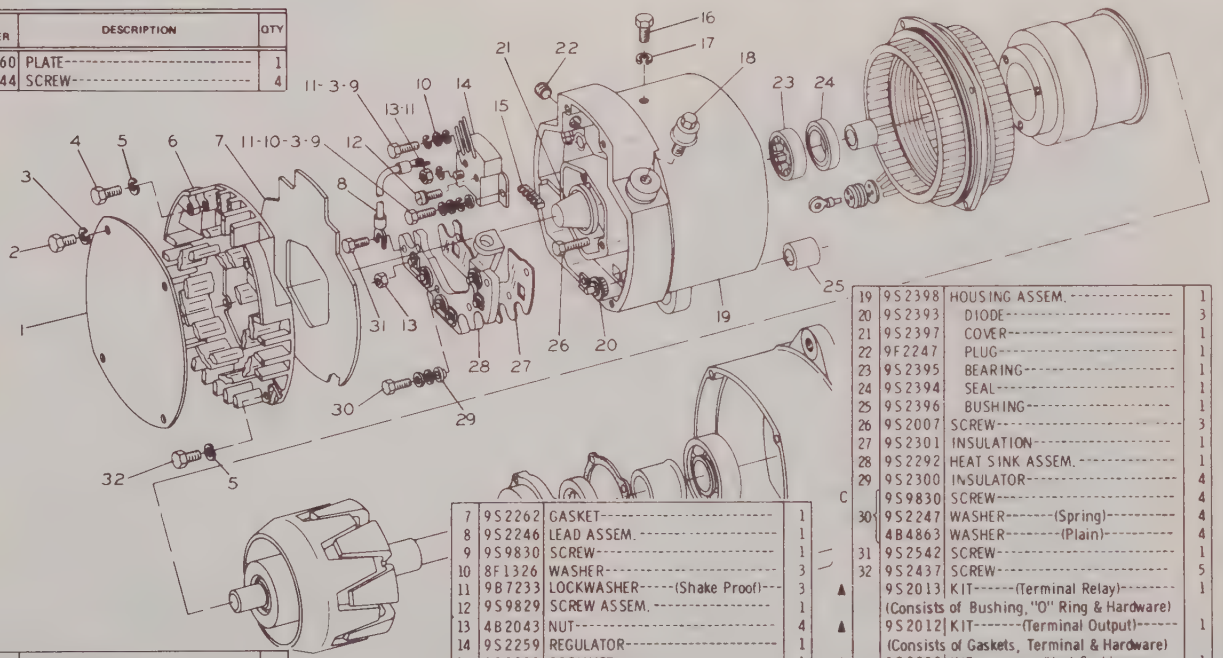
1N9406 ALTERNATOR ASSEMBLY—32 Volt, 50 Ampere—Part 1
Serial No. 46B1856—Up
Part of 4N7079 Alternator Group shown on Page 146A-3



REF. NO.	PART NUMBER	DESCRIPTION	QTY
1	3N1144	REGULATOR ASSEM.	1
2	9S2011	SCREW	1
3	1L4789	LOCKWASHER	1
4	3N1145	FIELD COIL AND SUPPORT ASSEM.	1
5	2P5616	FRAME	1
6	9S2256	GASKET	1
7	2F5721	BEARING	1
8	9S2391	SEAL	1
9	9S2252	SLINGER	1
10	7F7621	WASHER	1
C 11	2K4821	NUT	1
12	9S2302	ROTOR ASSEM.	1
13	9S2254	COLLAR	1
14	9S2008	SCREW	4
15	9S2258	FAN AND BAFFLE ASSEM.	1
16	9S2261	COLLAR	1
17	9S2009	BOLT	4
18	9S2004	STATOR ASSEM.	1
19	9S2006	INSULATOR	1
20	9S2005	GROMMET	1
21	9S2014	CLIP	3
22	9S2007	SCREW	3
23	9S2301	INSULATION	1
24	9S2300	INSULATOR	4
25	9S2247	WASHER (Spring)	4
	4B4863	WASHER (Plain)	4
26	9S2262	GASKET	1
27	9S2255	COVER	1
28	9S2544	SCREW	4
	8H878	LOCKWASHER	4
C 29	9S9830	SCREW	4
30	9S2260	PLATE	1
31	9S2437	SCREW	5
	7H2079	LOCKWASHER	5
32	9S2242	RACE	1
33	9F8125	LOCKWASHER	4
34	9S2390	RETAINER ASSEM.	1
35	9S2391	SEAL	1

C INDICATES CHANGE 203221

1N9406 ALTERNATOR ASSEMBLY—32 Volt, 50 Ampere—Part 2
Serial No. 46B1856—Up
Part of 4N7079 Alternator Group shown on Page 146A-3



REF. NO.	PART NUMBER	DESCRIPTION	QTY
1	9S2260	PLATE	1
2	9S2544	SCREW	4
3	8H878	LOCKWASHER	6
4	9S2438	SCREW	2
5	7H2079	LOCKWASHER	7
6	9S2255	COVER	1
7	9S2262	GASKET	1
8	9S2246	LEAD ASSEM.	1
9	9S9830	SCREW	1
10	8F1326	WASHER	3
11	9B7233	LOCKWASHER-----(Shake Proof)---	3
12	9S9829	SCREW ASSEM.	1
13	4B2043	NUT	4
14	9S2259	REGULATOR	1
15	9S2250	GROMMET	1
16	9S2011	SCREW	1
17	1L4789	LOCKWASHER	1
18	9S2389	STUD ASSEM.	1
19	9S2398	HOUSING ASSEM.	1
20	9S2393	DIODE	3
21	9S2397	COVER	1
22	9F2247	PLUG	1
23	9S2395	BEARING	1
24	9S2394	SEAL	1
25	9S2396	BUSHING	1
26	9S2007	SCREW	3
27	9S2301	INSULATION	1
28	9S2292	HEAT SINK ASSEM.	1
29	9S2300	INSULATOR	4
C	9S9830	SCREW	4
30	9S2247	WASHER-------(Spring)	4
	4B4863	WASHER-------(Plain)	4
31	9S2542	SCREW	1
32	9S2437	SCREW	5
▲	9S2013	KIT------(Terminal Relay) (Consists of Bushing, "O" Ring & Hardware)	1
▲	9S2012	KIT-------(Terminal Output) (Consists of Gaskets, Terminal & Hardware)	1
▲	9S2290	KIT---------(Heat Sink) (Diode Junction Hardware)	1
▲	9S2291	KIT--------(Heat Sink) (Positive Diode Hardware)	1

C INDICATES CHANGE

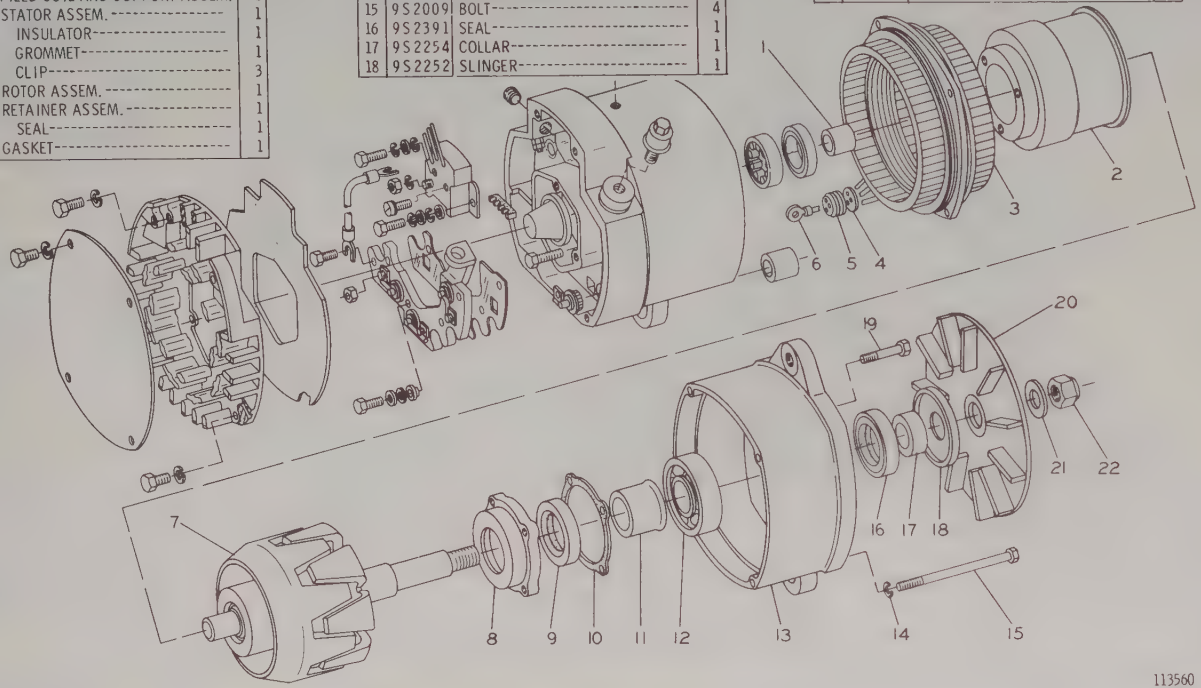
▲ NOT PART OF 5S9088 ALTERNATOR ASSEM.

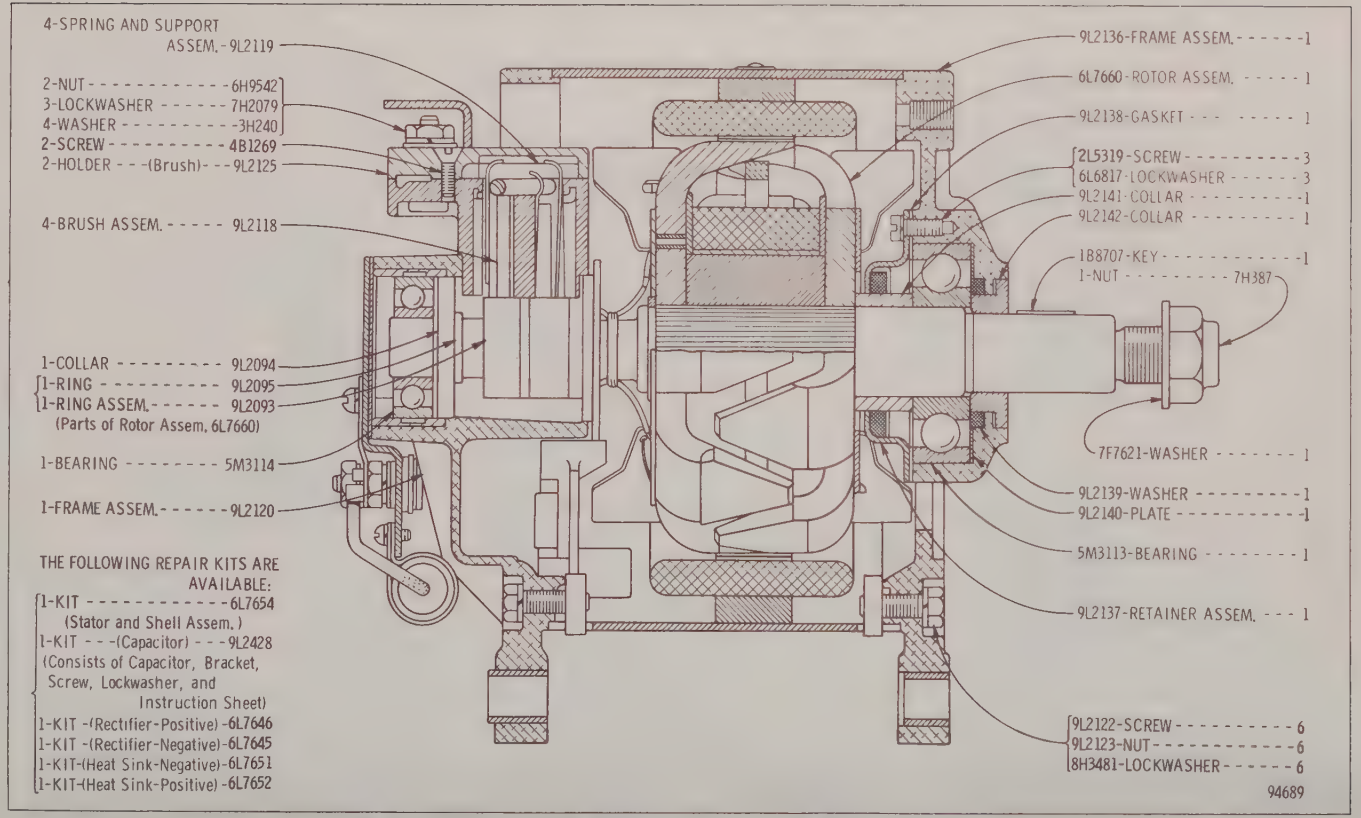
202886

5S9088 ALTERNATOR ASSEMBLY—24 Volt, 50 Ampere—Part 1
Serial No. 46B1856—Up
Part of 4N7078 Alternator Group listed on Page 146A-3

5S9088 ALTERNATOR ASSEMBLY—24 Volt, 50 Ampere—Part 2
Serial No. 46B1856—Up
Part of 4N7078 Alternator Group listed on Page 146A-3

REF. NO.	PART NUMBER	DESCRIPTION	QTY
1	9S2242	RACE	1
2	9S2248	FIELD COIL AND SUPPORT ASSEM.	1
3	9S2004	STATOR ASSEM.	1
4	9S2006	INSULATOR	1
5	9S2005	GROMMET	1
6	9S2014	CLIP	3
7	9S2302	ROTOR ASSEM.	1
8	9S2390	RETAINER ASSEM.	1
9	9S2391	SEAL	1
10	9S2256	GASKET	1
11	9S2261	COLLAR	1
12	2F5721	BEARING	1
13	2P5616	FRAME	1
14	3B4502	LOCKWASHER	4
15	9S2009	BOLT	4
16	9S2391	SEAL	1
17	9S2254	COLLAR	1
18	9S2252	SLINGER	1
19	9S2008	SCREW	4
20	9S2258	FAN AND BAFFLE ASSEM.	1
21	7F7621	WASHER	1
22	2K4821	LOCKNUT	1

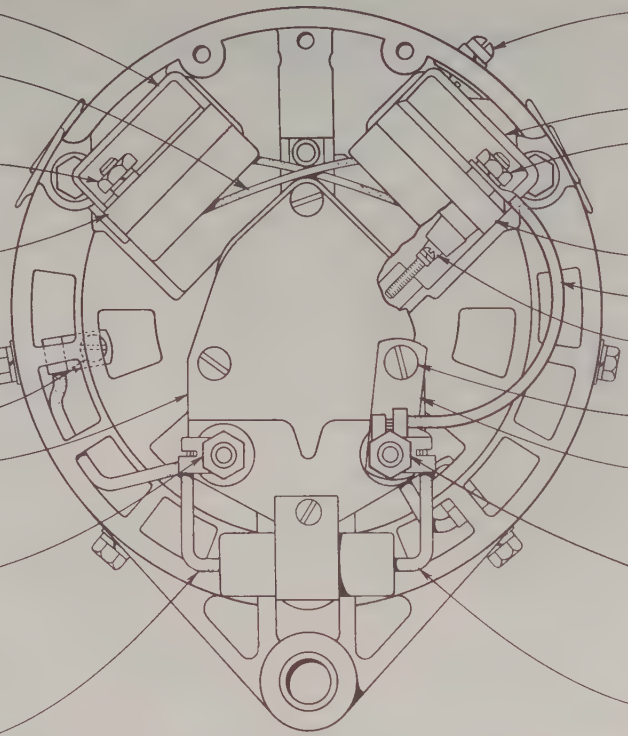




6L6590 ALTERNATOR ASSEMBLY—32 Volt, 45 Ampere—Side View
Part of 6L6597 Alternator Group shown on Page 146A

6L6590 ALTERNATOR ASSEMBLY—32 Volt, 45 Ampere—End View

Part of 6L6597 Alternator Group shown on Page 146A



1-COVER - - - - - - - - - - 9L2128

2-TERMINAL ASSEM. - - - 9L2116
(Field)

1-NUT - - - - - - - - - - - - 6H9542
1-LOCKWASHER - - - - - - -7H2079

1-CAP - - - - - - - - - - - - -9L2126

4-SCREW - - - - - - - - - - -9L2106
4-NUT - - - - - - - - - - - - -9L2107
4-LOCKWASHER - - - - - - 5L3870
4-INSULATOR - - - - - - - - 9L2109
4-BUSHING - - - - - - - - -9L2108
2-SCREW - - - - - - - - - - 9L2131
2-LOCKWASHER - - - - - -7H2079
1-PLATE - - - - - - - - - - -9L2132
1-GASKET - - - - - - - - - 9L2133
2-NUT - - - - - - - - - - - -4L5694
1-LOCKWASHER- - - - - - -1L6314
(.366" outside diameter)
1-LOCKWASHER- - - - - - 5L3870
(.427" outside diameter)
1-BUSHING - - - - - - - - -9L2112
1-WASHER - - - - (◎) - - - -9L2114
1-WASHER - - - - - - - - - 3F3711
(.56" outside diameter)

1-TERMINAL AND LEAD
ASSEM. -(positive) - 9L2111

4B1306-SCREW - -(Ground) - - -1
7H2079-LOCKWASHER- - - - - - 1

9L2128-COVER - - - - - - - - - - -1
6H9542-NUT - - - - - - - - - - - -1
7H2079-LOCKWASHER - - - - - -1

9L2127-CAP - - - - - - - - - - - 1

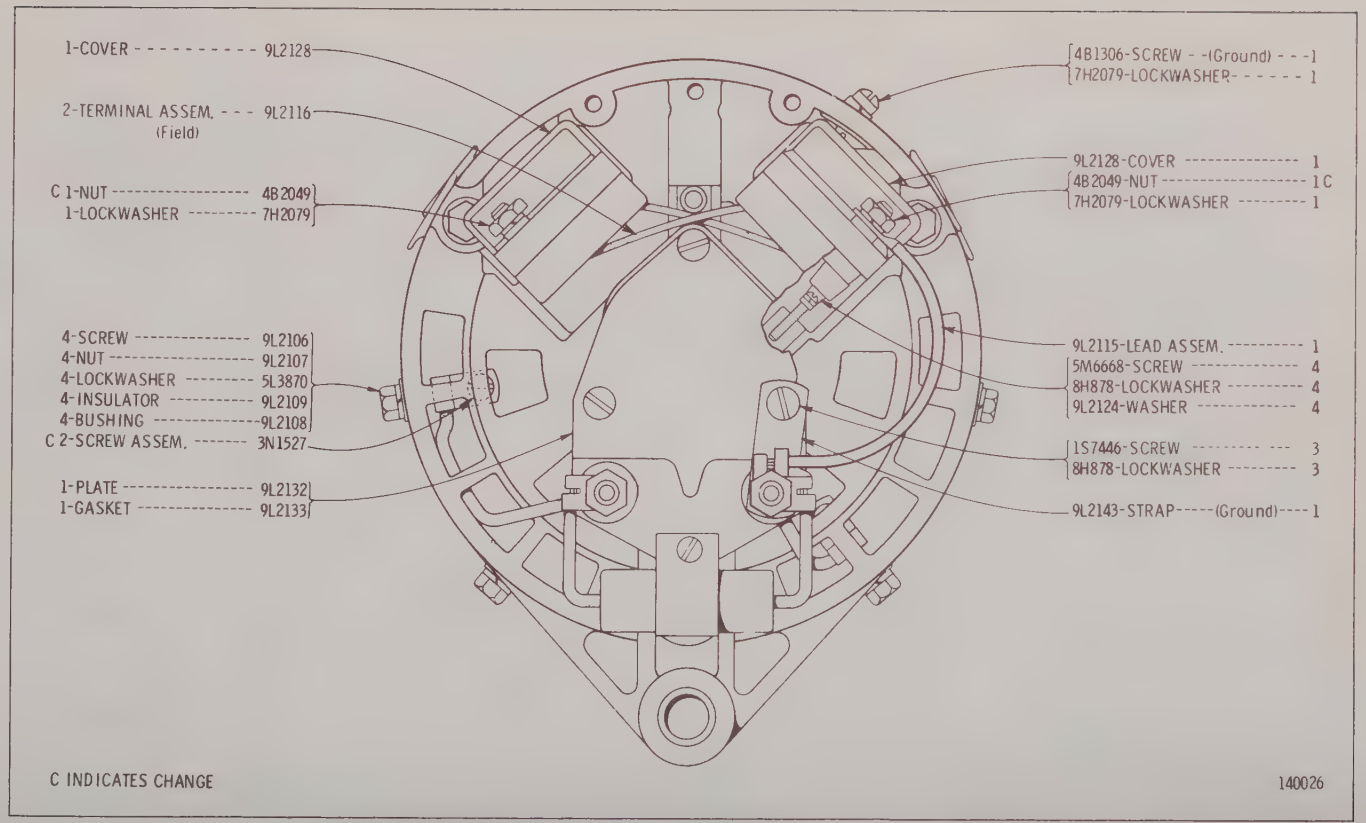
9L2115-LEAD ASSEM.- - - - - - -1
5M6668-SCREW - - - - - - - - - 4
8H878-LOCKWASHER - - - - - - 4
9L2124-WASHER- - - - - - - - - 4

1S7446-SCREW - - - - - - - - - 3
8H878-LOCKWASHER - - - - - - -3

9L2143-STRAP - - (Ground) - - -1
4L5694-NUT - - - - - - - - - - - -2
1L6314-LOCKWASHER - - - - - - 1
(.366" outside diameter)
5L3870-LOCKWASHER- - - - - - 1
(.427" outside diameter)
9L2112-BUSHING - - - - - - - - 1
9L2114-WASHER- - - - (◎) - - - -1
3F3711-WASHER - - - - - - - - - 1
(.56" outside diameter)

9L2110-TERMINAL AND
LEAD ASSEM. -(Negative) - 1

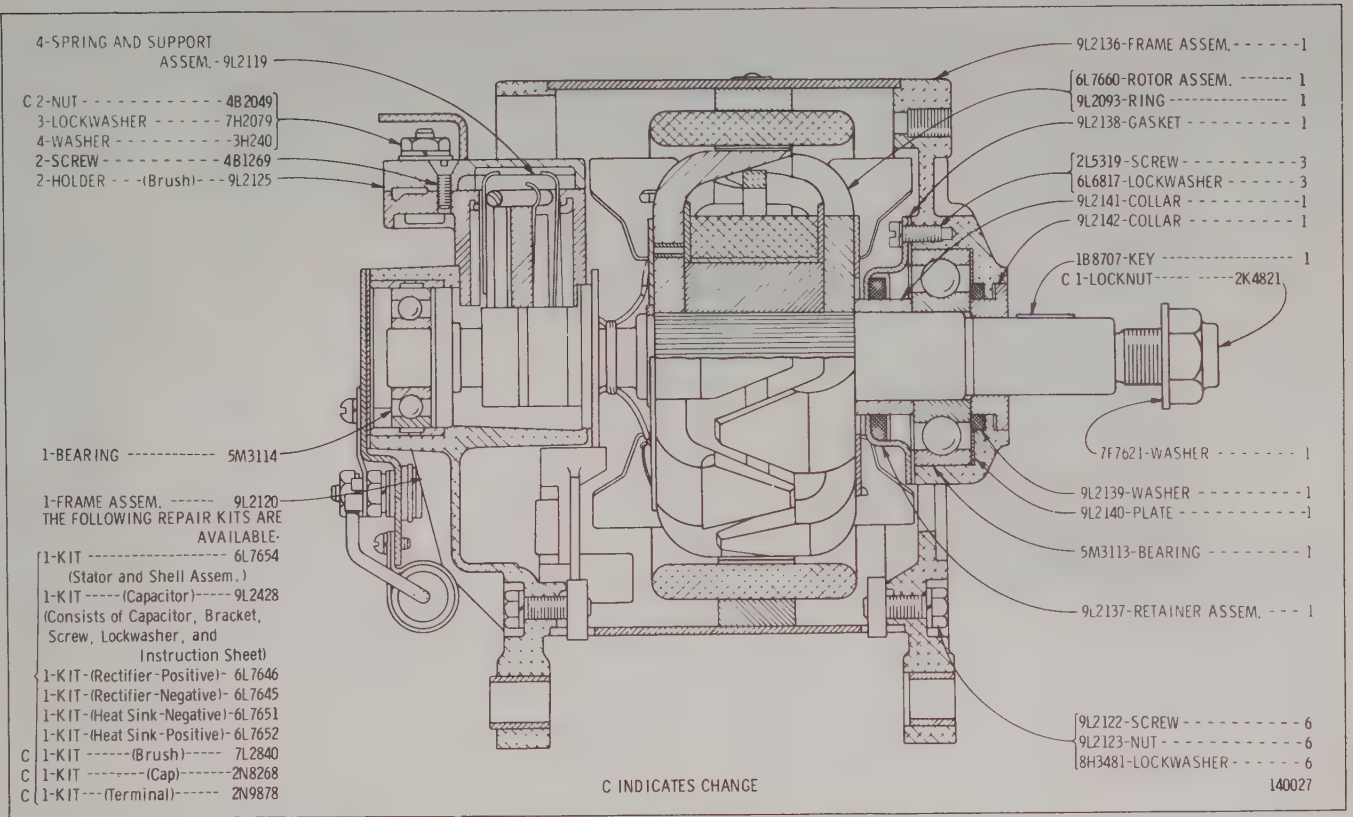
94698

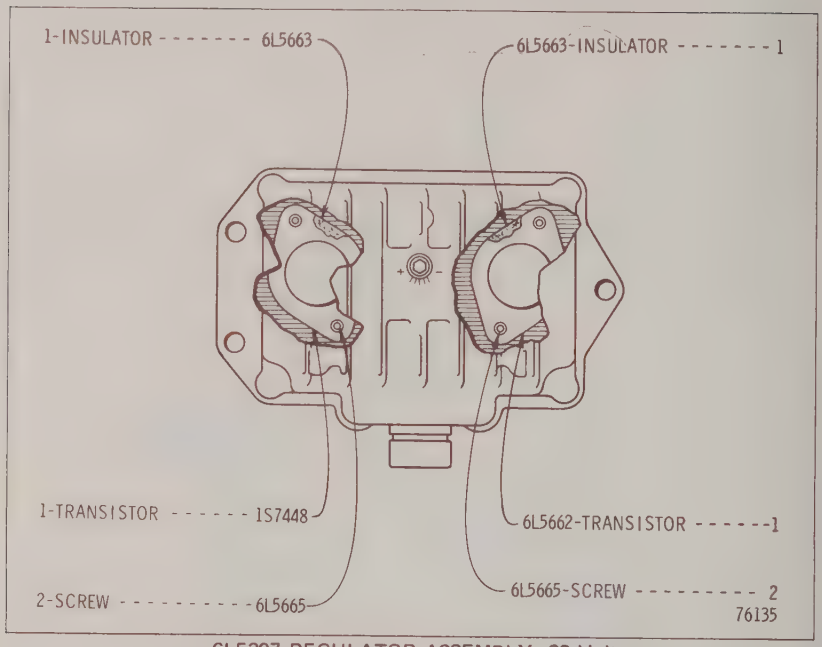


6L6590 ALTERNATOR ASSEMBLY—32 Volt, 45 Ampere—Side View—Type 2
Part of 6L6597 Alternator Group shown on Page 146A

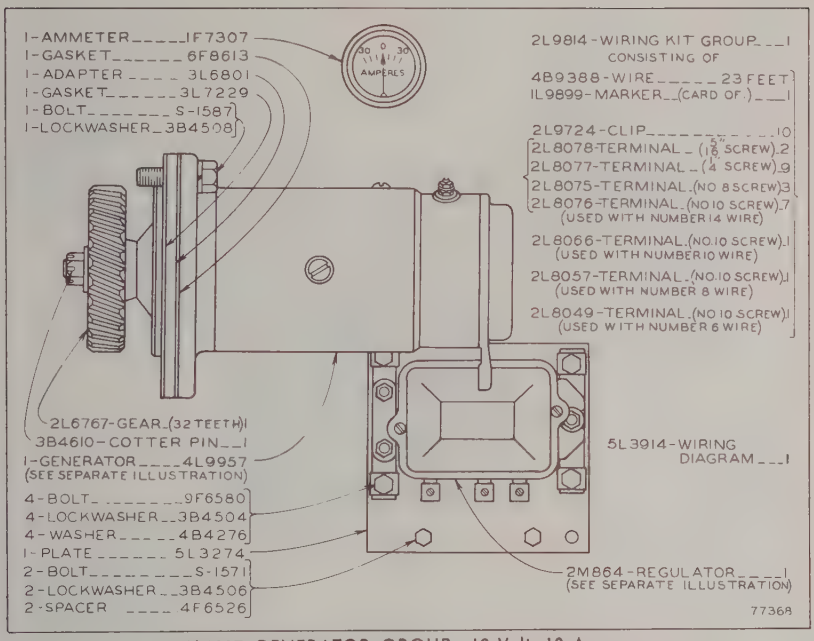
6L6590 ALTERNATOR ASSEMBLY—32 Volt, 45 Ampere—End View—Type 2

Part of 6L6597 Alternator Group shown on Page 146A

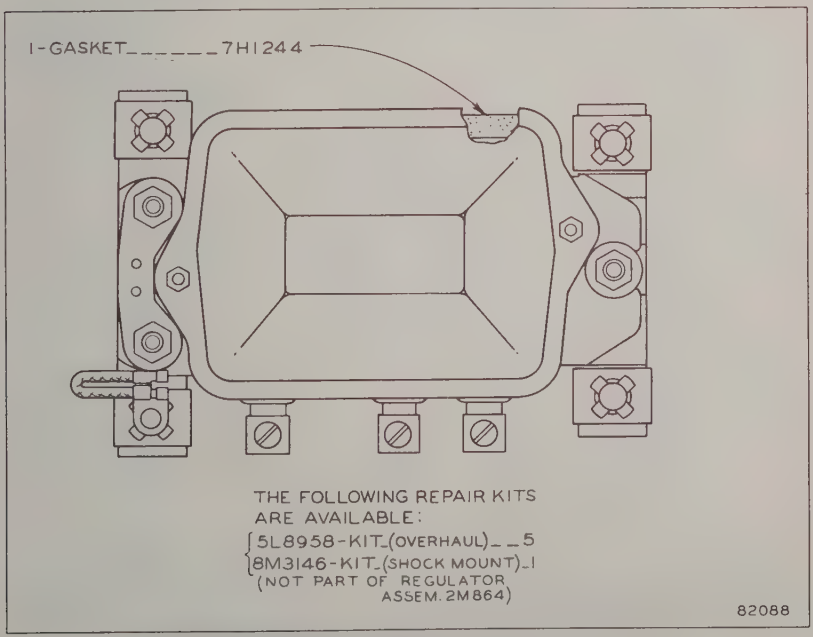




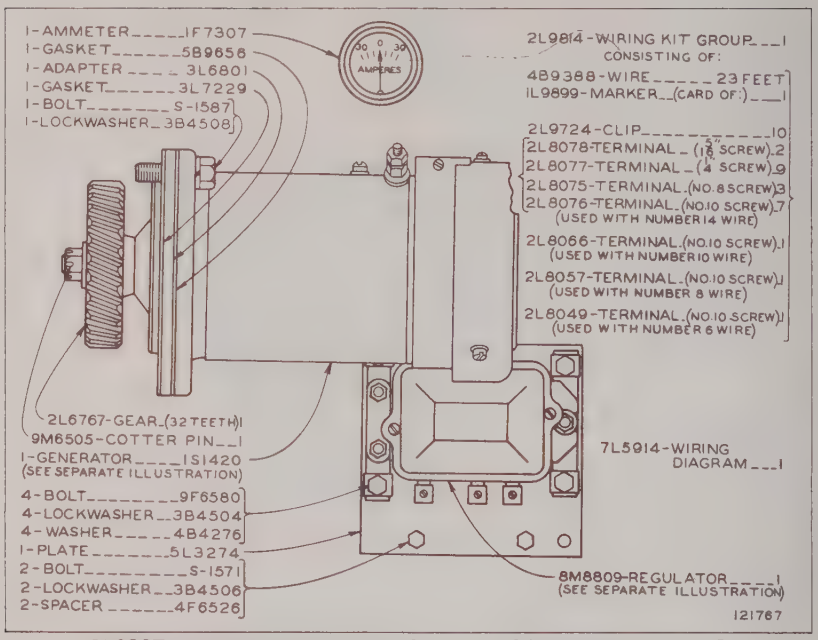
6L5397 REGULATOR ASSEMBLY—32 Volt
Part of 6L6597 Alternator Group shown on Page 146A
6L5658 REGULATOR ASSEMBLY—30 Volt
FOR USE WITH 6L6597 ALTERNATOR GROUP SHOWN ON PAGE 146A



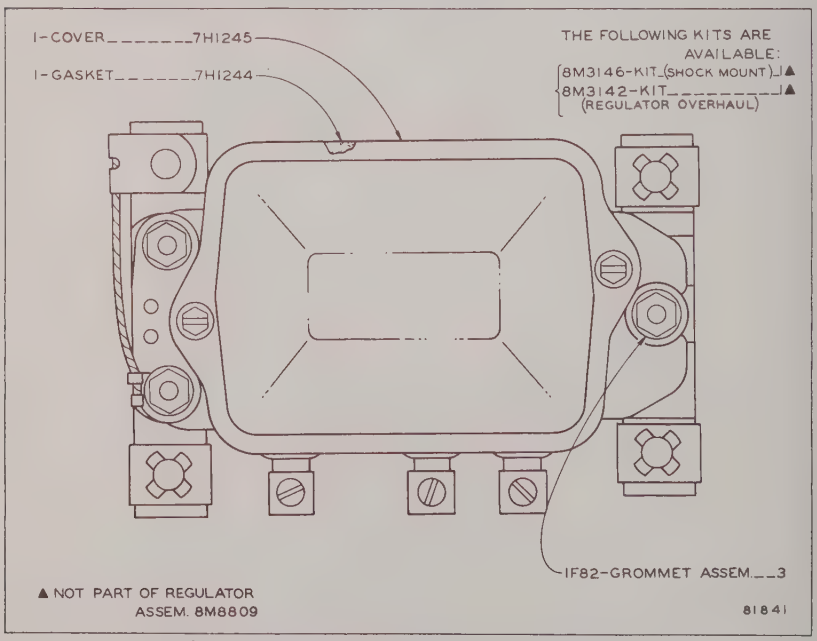
2L6807 GENERATOR GROUP—12 Volt, 10 Ampere
FOR USE WITHOUT RIGHT HAND AUXILIARY DRIVE
4L9957 Generator Assembly parts are shown on Page 149



2M864 REGULATOR ASSEMBLY—12 Volt, 10 Ampere
Part of 2L6807 Generator Group

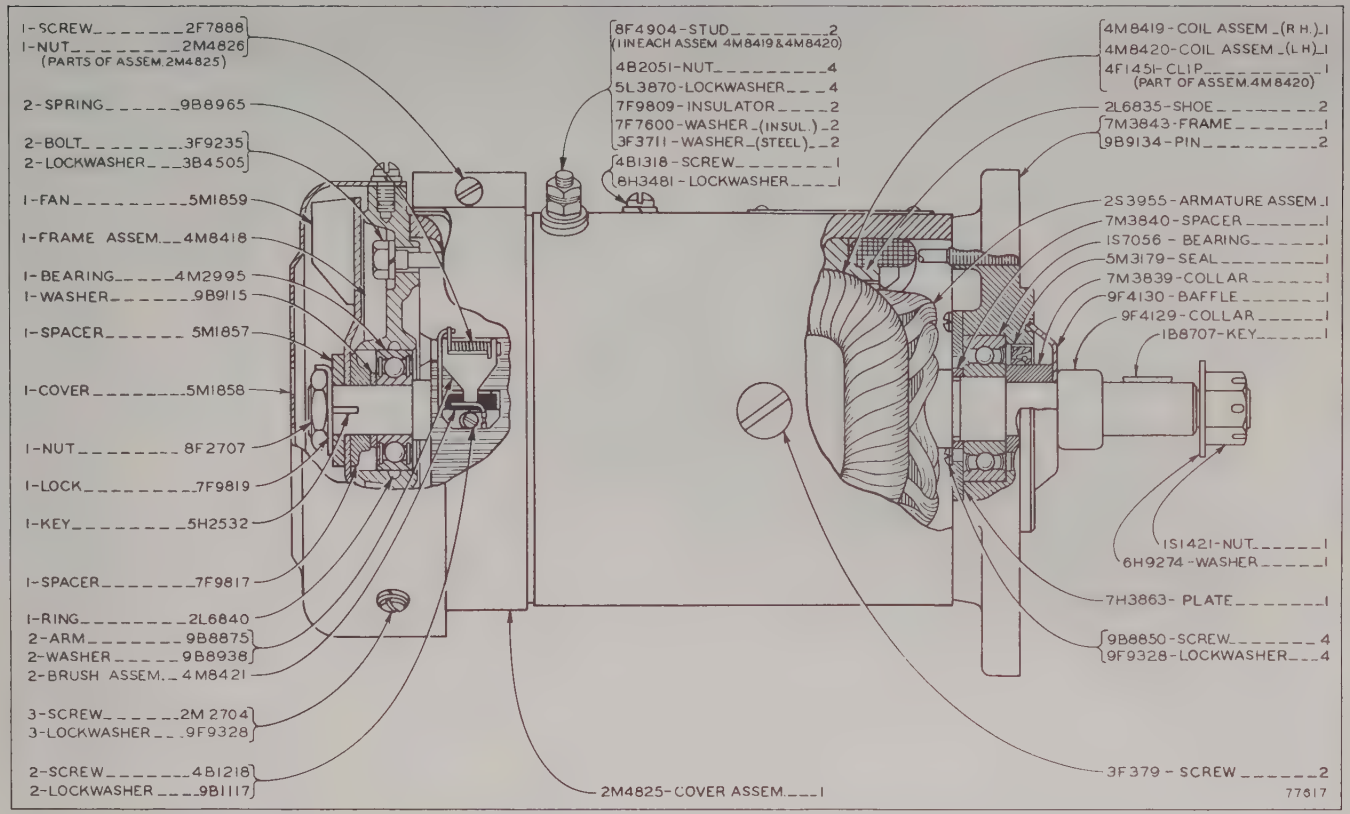


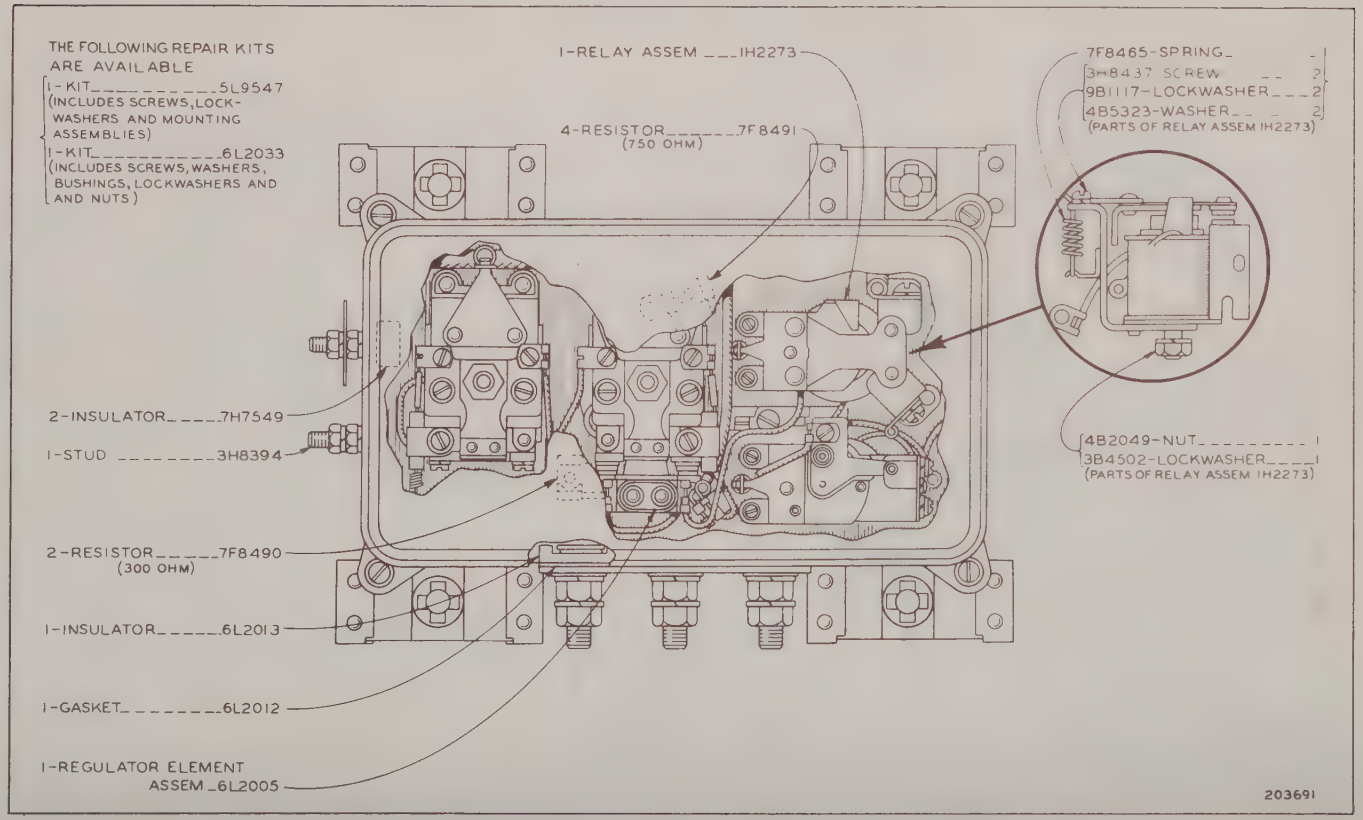
2L6807 GENERATOR GROUP--12 VOLT--24 AMPERE--TYPE 2
FOR USE WITHOUT RIGHT HAND AUXILIARY DRIVE
1S1420 GENERATOR PARTS ARE SHOWN ON PAGE 147B



8M8809 REGULATOR ASSEMBLY--12 VOLT--24 AMPERE
PART OF 2L6807 GENERATOR GROUP

1S1420 GENERATOR ASSEMBLY--12 VOLT--24 AMPERE
PART OF 2L6807 GENERATOR GROUP SHOWN ON PAGE 147A

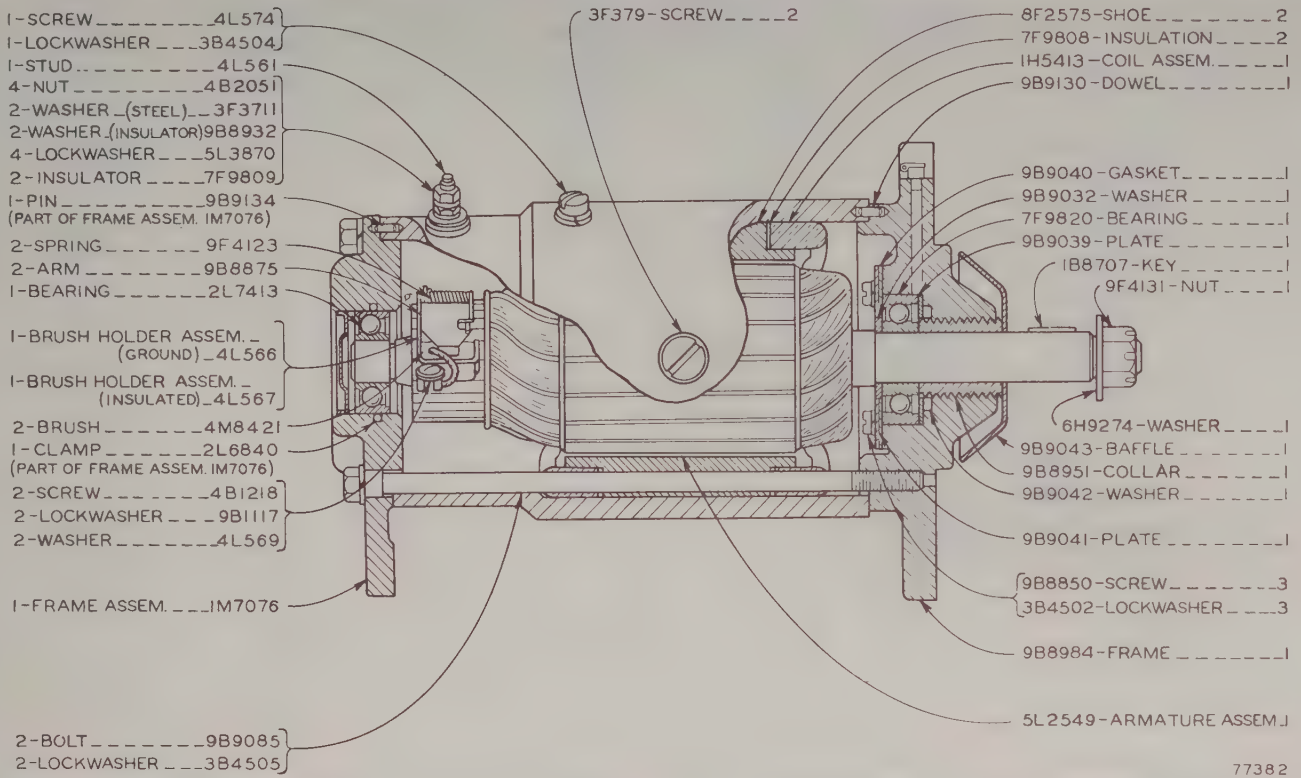


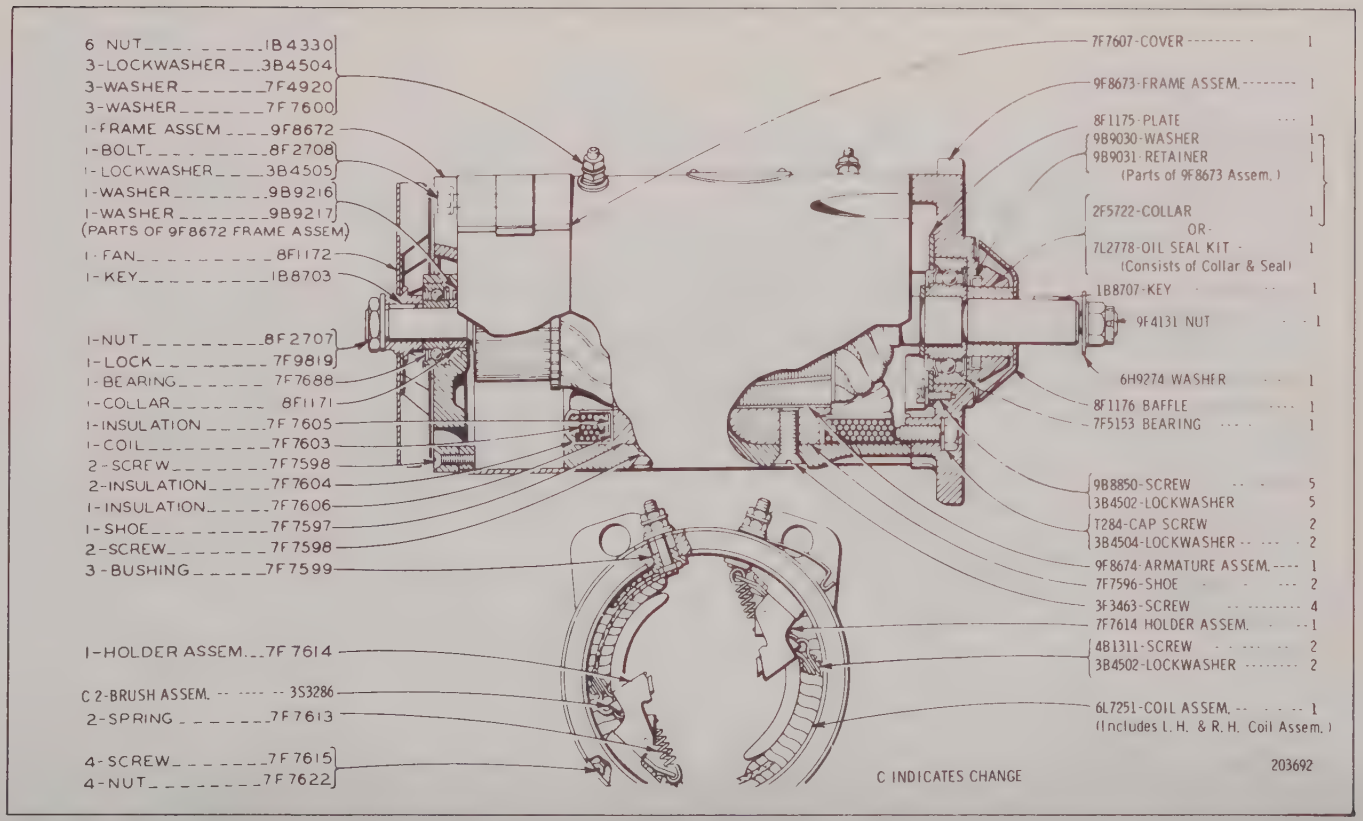


5L7691 REGULATOR ASSEMBLY—32 Volt, 15 Ampere
Part of 2L6809 and 2L9399 Generator Group shown on Pages 145 and 146

4L9957 GENERATOR—12 Volt, 10 Ampere

Part of 2L6807 Generator Group shown on Page 147





9F2569 GENERATOR—32 Volt, 15 Ampere

Part of 2L6809 and 2L9399 Generator Groups shown on Pages 145 and 146

7L3083 ELECTRIC TACHOMETER GROUP--12 VOLT
CONSISTS OF:

1	5L7434	TACHOMETER ASSEMBLY
1	5L7452	SENDING UNIT ASSEMBLY
1	.....	PRINT OF WIRING DIAGRAM

7L3084 ELECTRIC TACHOMETER GROUP--24 VOLT
CONSISTS OF:

1	5L7445	TACHOMETER ASSEMBLY
1	5L7452	SENDING UNIT ASSEMBLY
1	.....	PRINT OF WIRING GROUP

ELECTRIC TACHOMETERS
Only separate parts serviced. When complete Group is required order 3N6871 shown on Page 150C

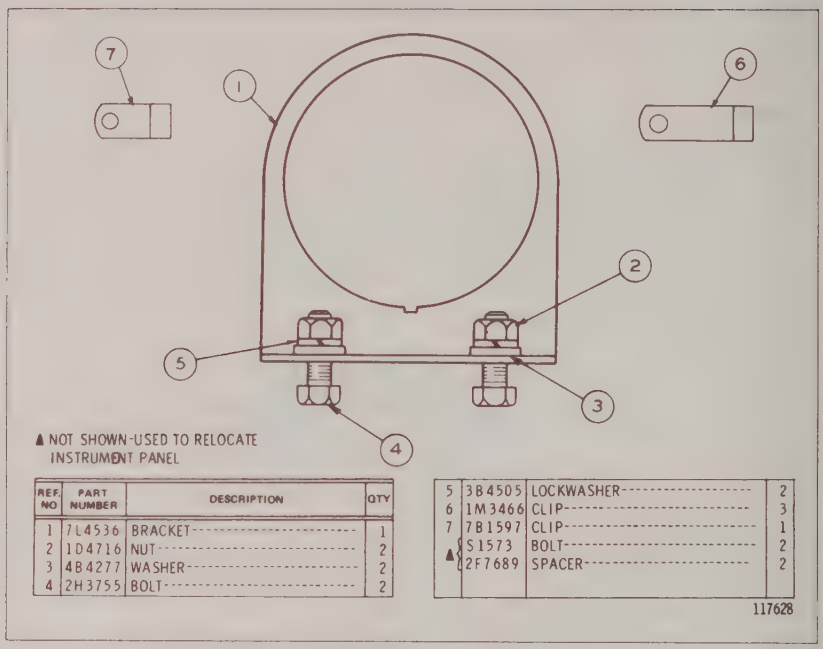
REMOTE MOUNTED
CONSISTS OF:

1	3M9766	TACHOMETER
1	5L8164	ADAPTER
1	5L9195	FLEXIBLE SHAFT--12 FOOT
		- OR -
1	5L7775	FLEXIBLE SHAFT--15 FOOT
		- OR -
1	5L9113	FLEXIBLE SHAFT--20 FOOT

ENGINE MOUNTED
CONSISTS OF:

1	7L4535	TACHOMETER MOUNTING GROUP..... 150B
1	3M9766	TACHOMETER
1	1L9112	ADAPTER
1	1S2436	FLEXIBLE SHAFT--66 INCHES

MECHANICAL TACHOMETERS

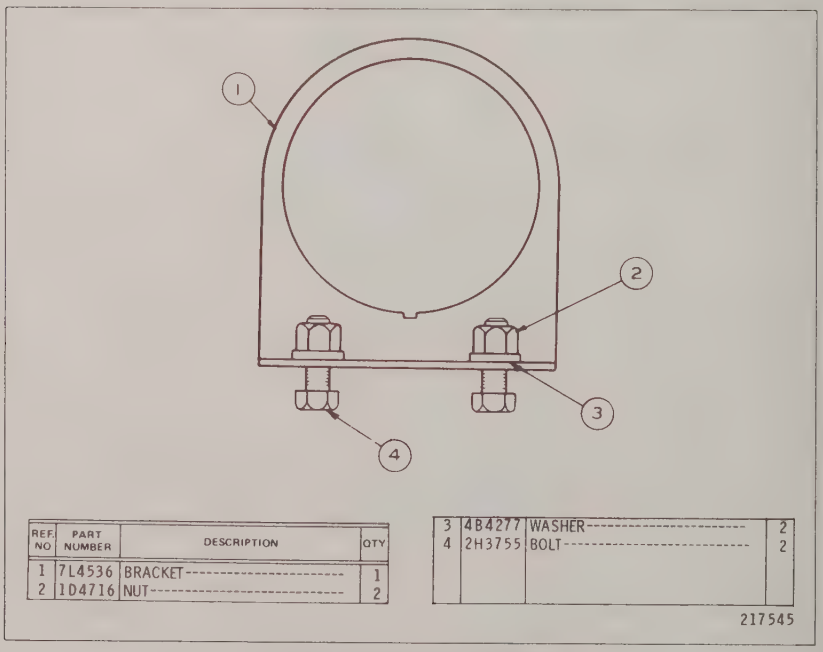


▲ NOT SHOWN-USED TO RELOCATE INSTRUMENT PANEL

REF. NO	PART NUMBER	DESCRIPTION	QTY
1	7L4536	BRACKET	1
2	1D4716	NUT	2
3	4B4277	WASHER	2
4	2H3755	BOLT	2
5	3B4505	LOCKWASHER	2
6	1M3466	CLIP	3
7	7B1597	CLIP	1
▲	S1573	BOLT	2
▲	2F7689	SPACER	2

117628

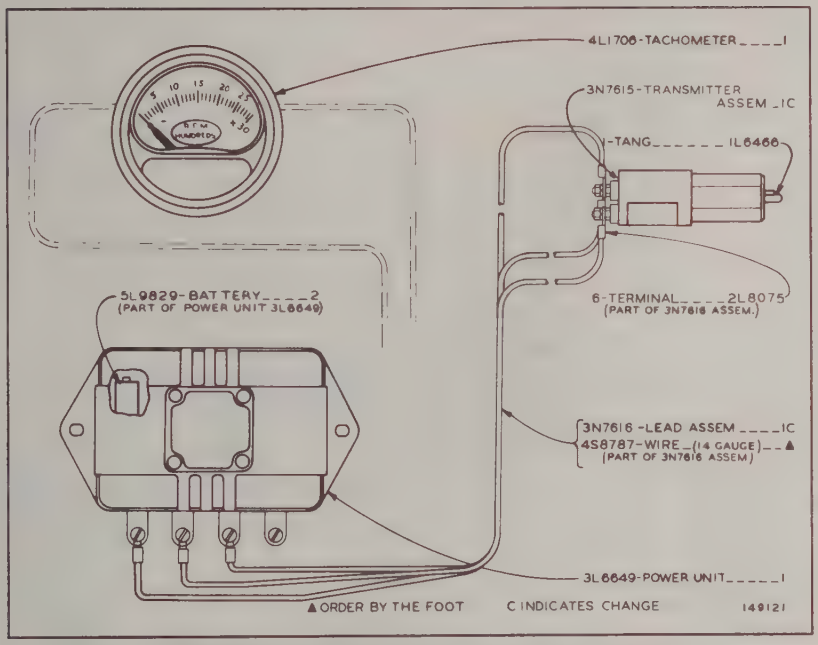
7L4535 TACHOMETER MOUNTING GROUP—Type 1
Part of Mechanical Tachometers listed on Page 150A



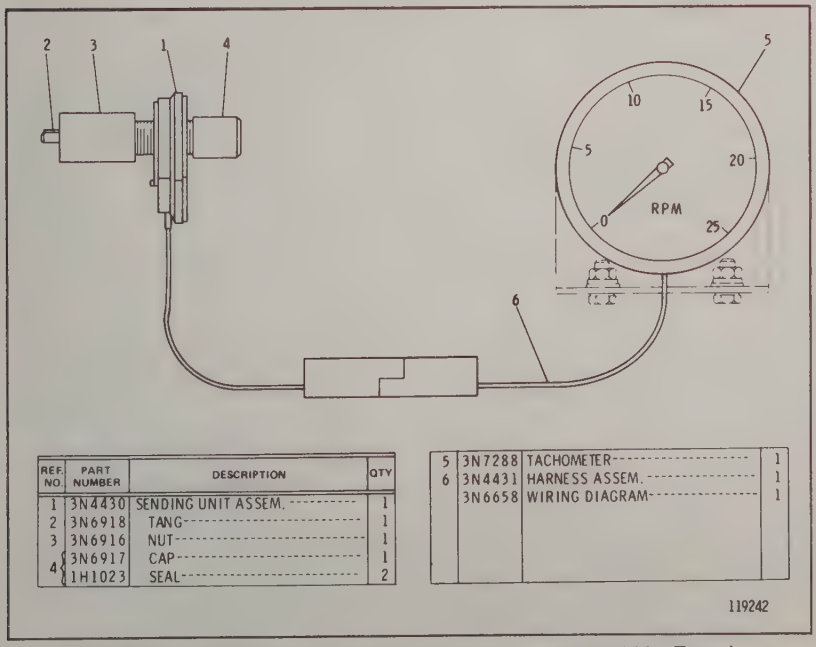
REF. NO	PART NUMBER	DESCRIPTION	QTY
1	7L4536	BRACKET	1
2	1D4716	NUT	2
3	4B4277	WASHER	2
4	2H3755	BOLT	2

217545

7L4535 TACHOMETER MOUNTING GROUP—Type 2
Part of Mechanical Tachometers listed on Page 150A

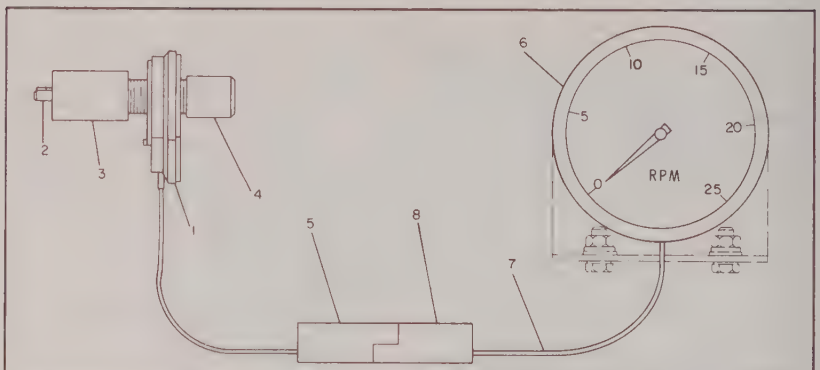


4L2353 ELECTRIC TACHOMETER GROUP—Type 2
REMOTE MOUNTED. Only separate parts serviced
When complete Group is required order 3N6871



REF. NO.	PART NUMBER	DESCRIPTION	QTY
1	3N4430	SENDING UNIT ASSEM.	1
2	3N6918	TANG	1
3	3N6916	NUT	1
4	3N6917	CAP	1
	1H1023	SEAL	2
5	3N7288	TACHOMETER	1
6	3N4431	HARNESS ASSEM.	1
	3N6658	WIRING DIAGRAM	1

3N6871 ELECTRIC TACHOMETER GROUP—0—2500 RPM—Type 1



	REF NO.	PART NUMBER	DESCRIPTION	QTY.
C	1	5N8176	SENDER ASSEM. --(tachometer)--- (Includes)	1
	2	3N6918	TANG----------	1
	3	3N6916	NUT----------	1
	4	3N6917	CAP----------	1
		1H1023	SEAL----------	2
	5	7N9738	HOUSING----------	1
		7N7780	PIN----------	1
		7N7779	SOCKET----------	1

	6	3N7288	TACHOMETER----------	1
C		5N8209	HARNESS ASSEM. ---------- (Includes)	1
▲	7	5P5677	WIRE----------(18 gauge)	
		7N9017	TERMINAL----------	2
		7N9737	HOUSING----------	1
	8	7N7780	PIN----------	1
		7N7779	SOCKET----------	1
●		3N6658	WIRING DIAGRAM----------	1

C INDICATES CHANGE ▲ ORDER BY THE METER ● NOT SHOWN 232342

3N6871 ELECTRIC TACHOMETER GROUP—0—2500 RPM—Type 2

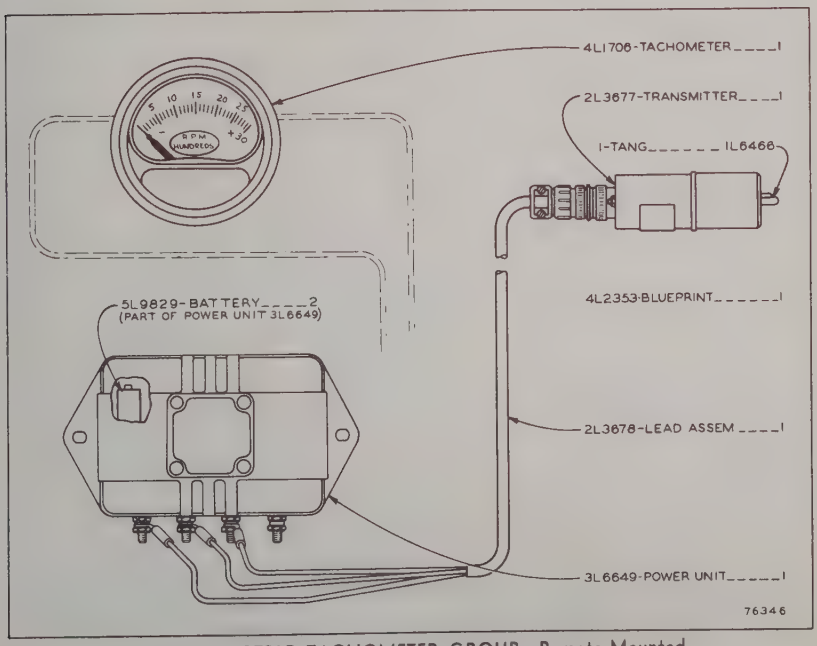
1 5L7434 Tachometer Assembly—12 Volt

— or —

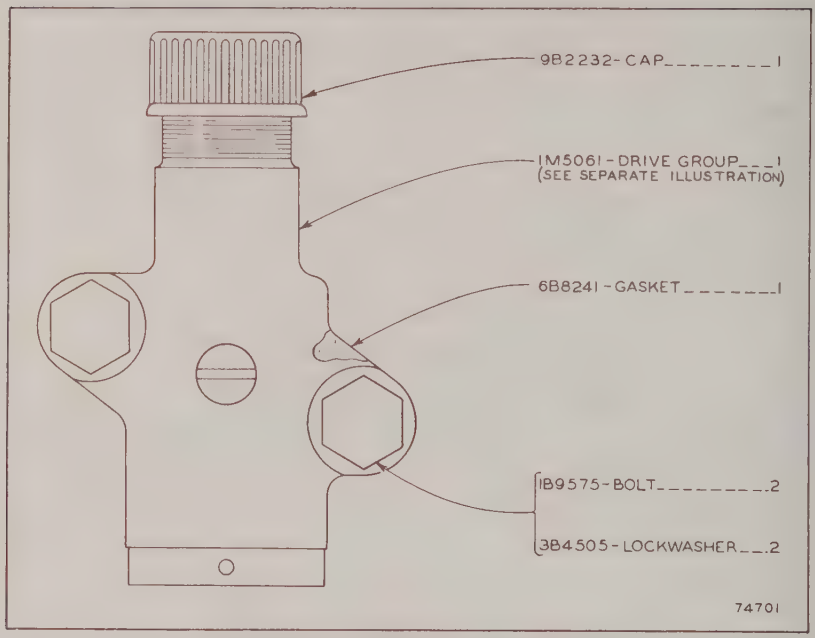
1 5L7445 Tachometer Assembly—24 or 32 Volt

1 5L7452 Sending Unit Assembly

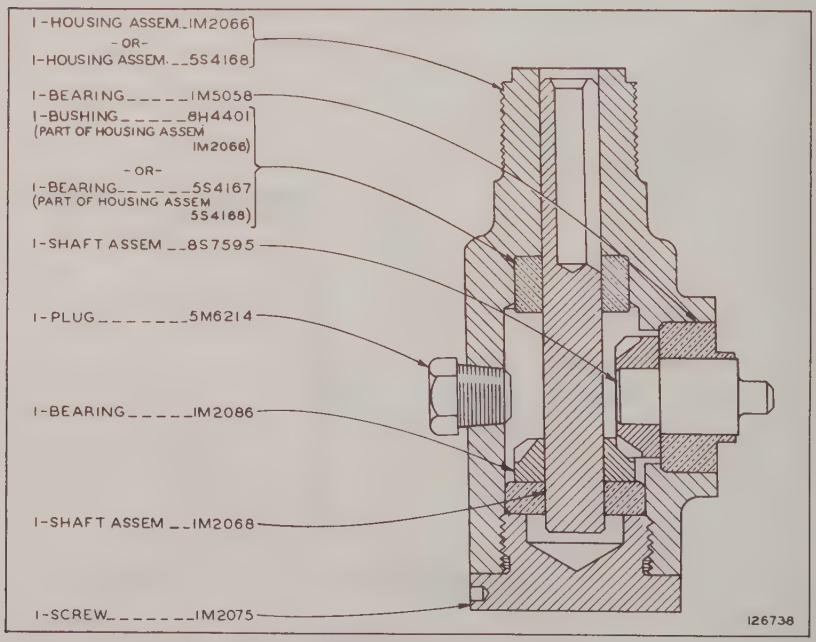
ELECTRIC TACHOMETERS



4L2353 ELECTRIC TACHOMETER GROUP—Remote Mounted

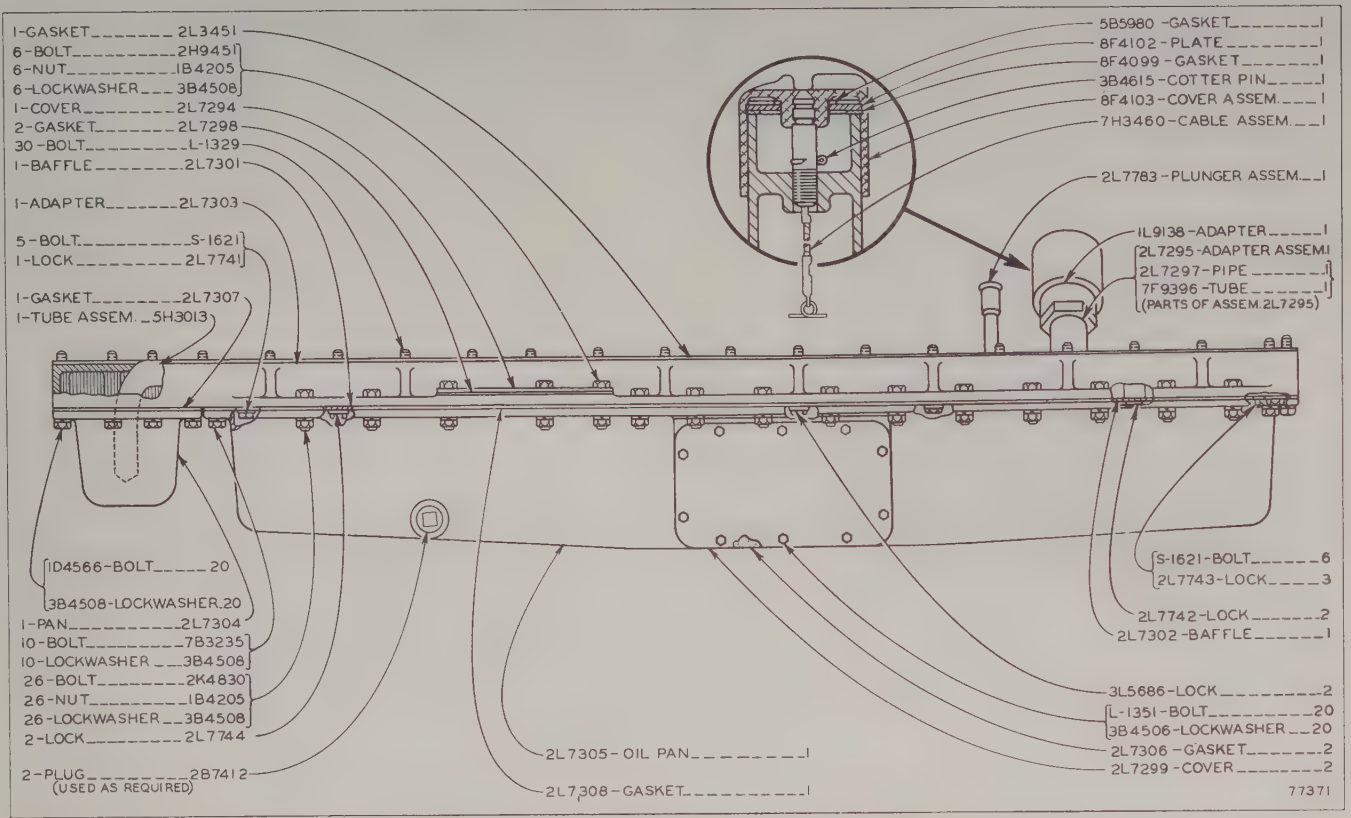


4L5789 TACHOMETER DRIVE GROUP

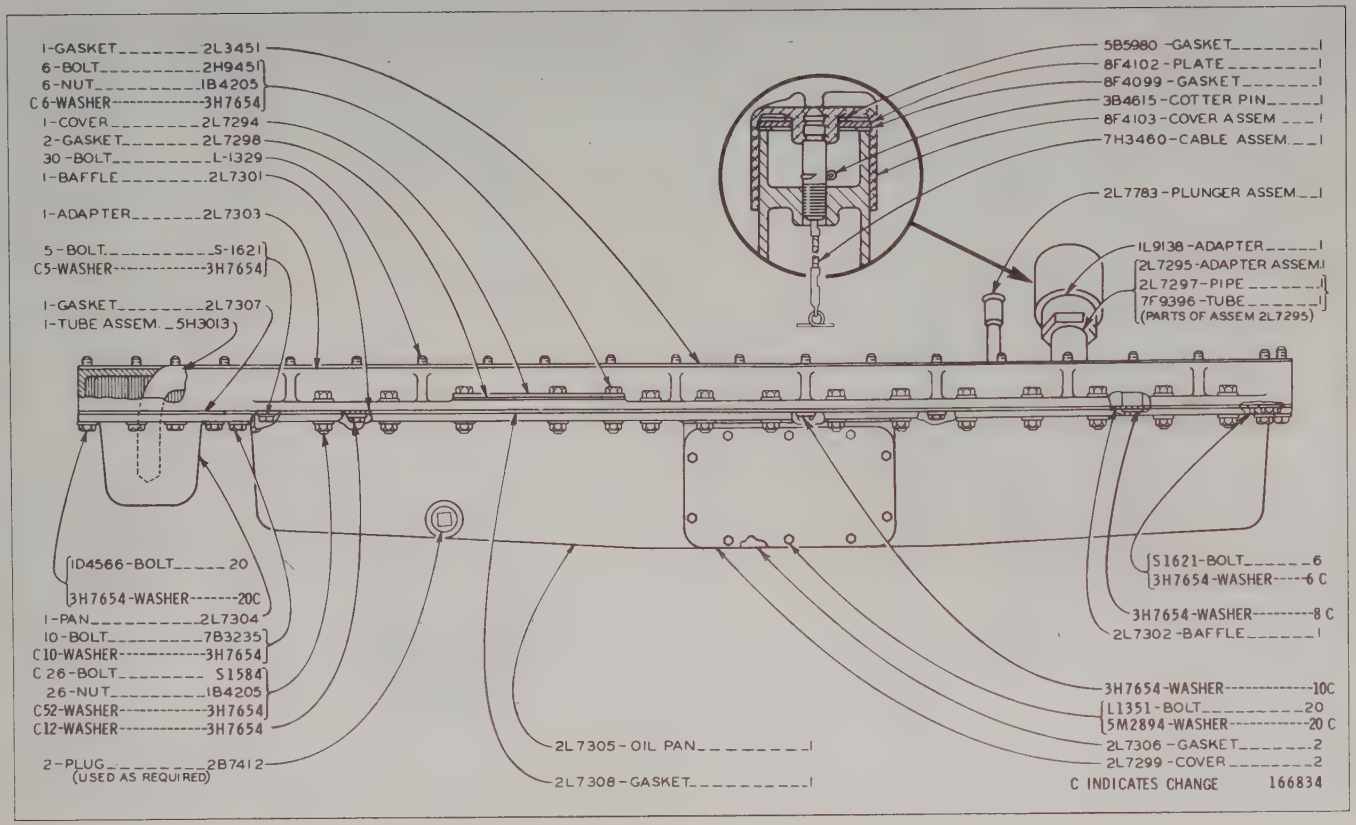


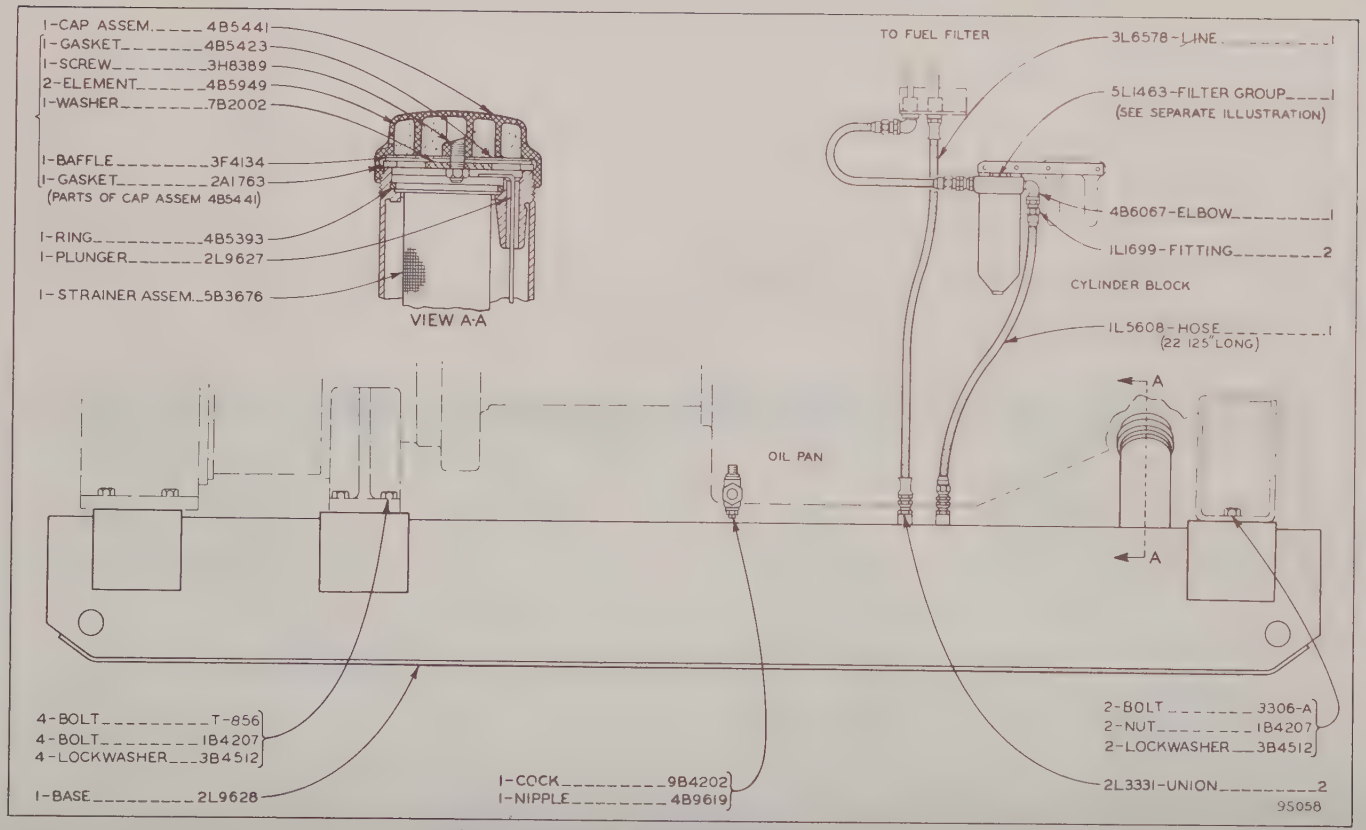
1M5061 TACHOMETER DRIVE GROUP
Part of 4L5789 Tachometer Drive Group

2L3513 OIL PAN GROUP—Type 1



2L3513 OIL PAN GROUP—Type 2



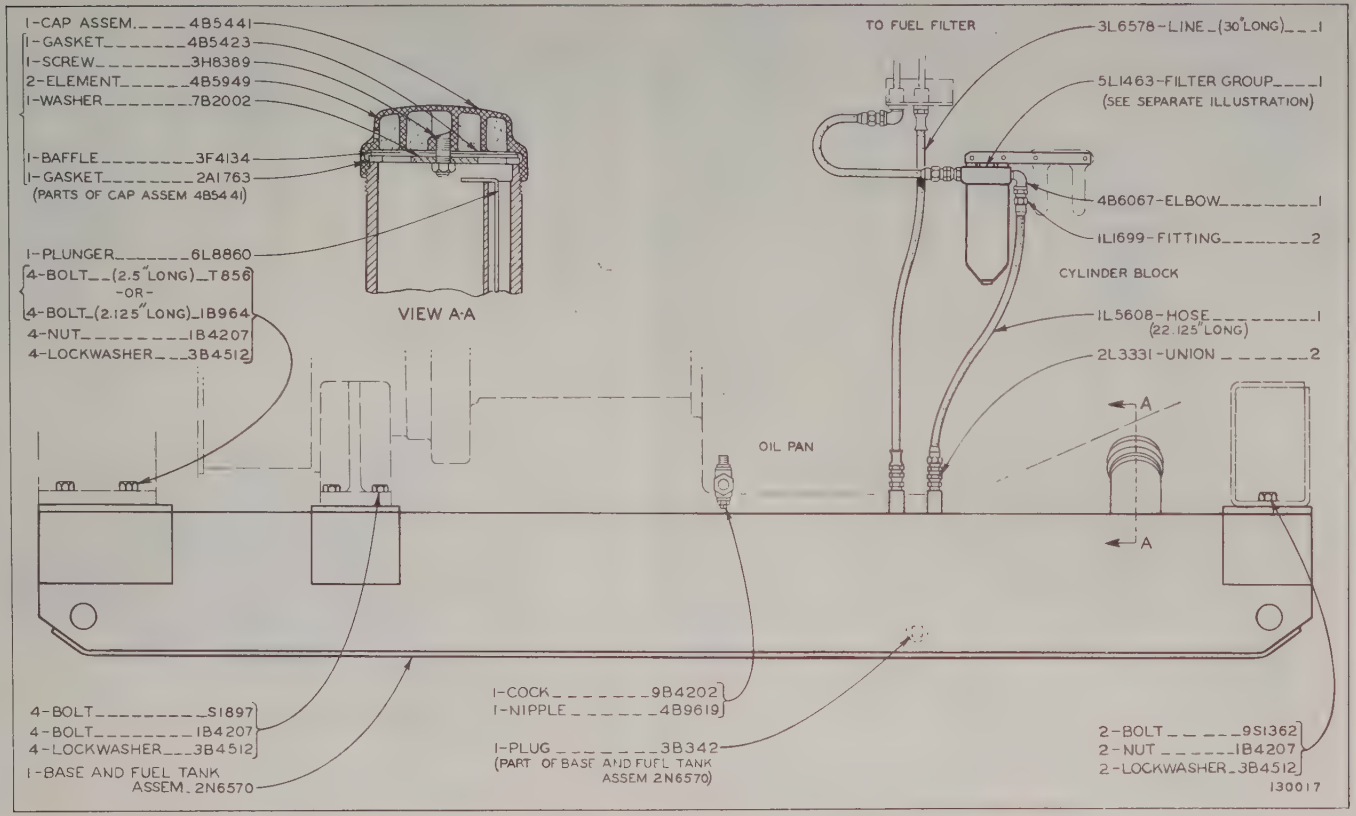


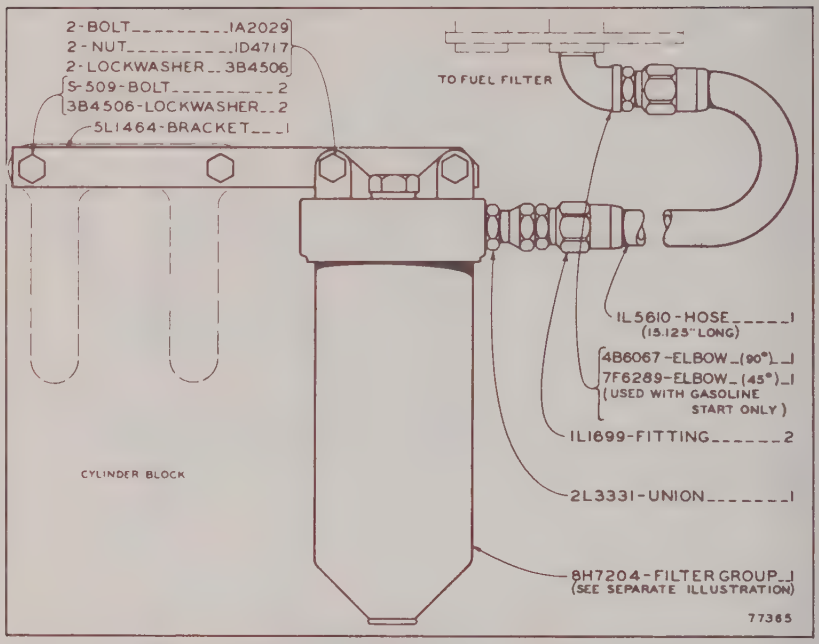
5L1465 BASE AND FUEL TANK GROUP—First Type

5L1463 Primary Fuel Filter and Lines Group parts are shown on Page 156

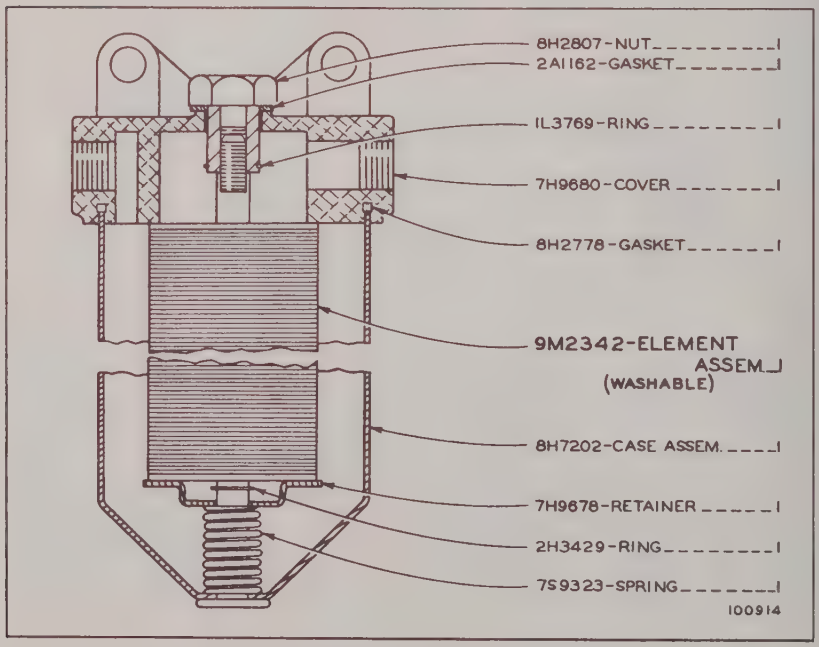
5L1465 BASE AND FUEL TANK GROUP—Second Type

5L1463 Primary Fuel Filter and Lines Group parts are shown on Page 156

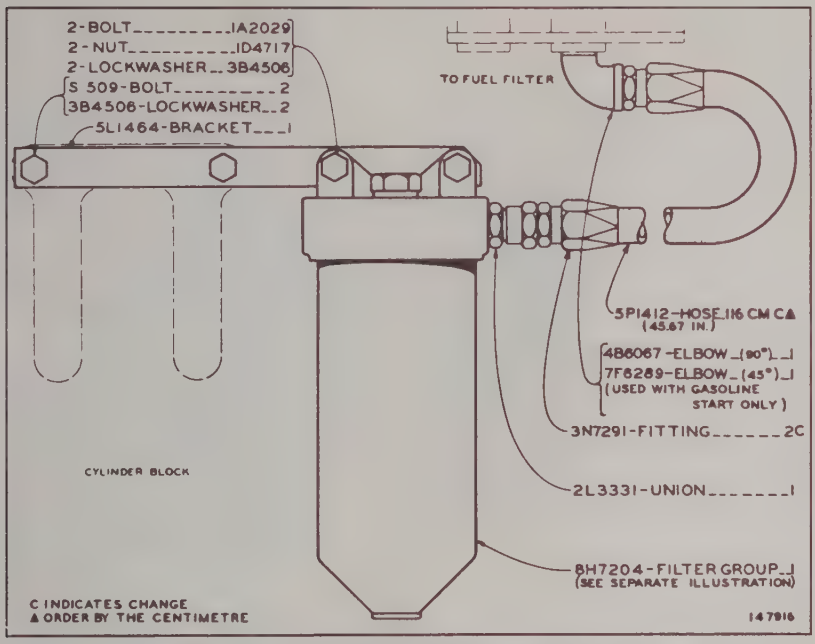




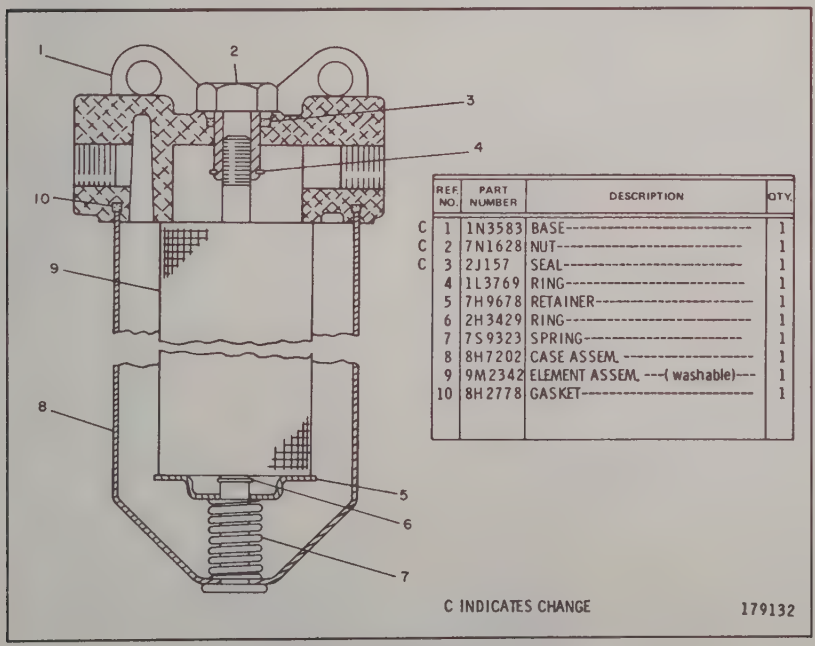
5L1463 PRIMARY FUEL FILTER AND LINES GROUP—Type 1
Also part of 5L1465 Base and Fuel Tank Group shown on Pages 154 & 155
FOR USE WITH FLEXIBLE FUEL LINES



8H7204 FILTER GROUP—Type 1
Part of 5L1463 Primary Fuel Filter and Lines Group

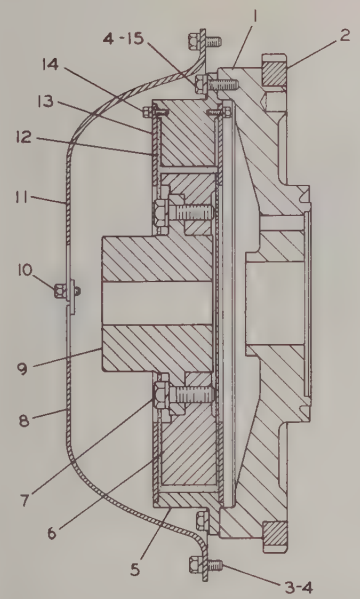


5L1463 PRIMARY FUEL FILTER AND LINES GROUP—Type 2
FOR USE WITH FLEXIBLE FUEL LINES. 8H7204 Filter parts are shown on Page 156
Also part of 5L1465 Base and Fuel Tank Group shown on Pages 154 and 155



	REF. NO.	PART NUMBER	DESCRIPTION	QTY.
C	1	1N3583	BASE	1
C	2	7N1628	NUT	1
C	3	2J157	SEAL	1
	4	1L3769	RING	1
	5	7H9678	RETAINER	1
	6	2H3429	RING	1
	7	7S9323	SPRING	1
	8	8H7202	CASE ASSEM.	1
	9	9M2342	ELEMENT ASSEM. ---(washable)---	1
	10	8H2778	GASKET	1

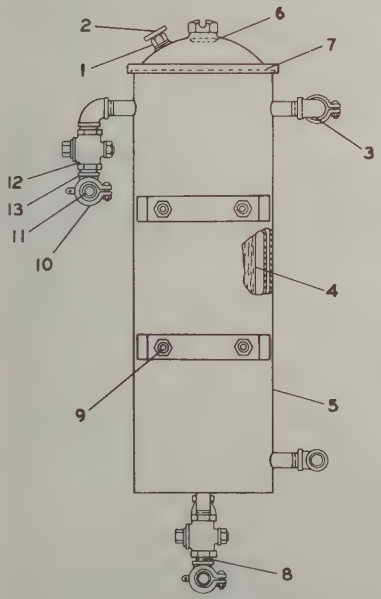
8H7204 FILTER GROUP—Type 2
Part of 5L1463 Primary Fuel Filter and Lines Group



REF. NO.	PART NUMBER	DESCRIPTION	QTY
1	6L4545	FLYWHEEL ASSEM.	1
2	5L5287	GEAR	1
3	S1621	BOLT	16
4	3B4508	LOCKWASHER	16
5	4L4586	COUPLING	1
6	6L3049	COUPLING	1
7	1D4625	BOLT	8
	3B4514	LOCKWASHER	8
8	9F7470	COVER ASSEM.	1
9	5L4576	HUB	1
10	4F4879	BOLT	2
	3B4506	LOCKWASHER	2
11	9F7469	COVER	1
12	7L5589	BOOT	3
13	3L9030	PLATE	2
	3L9032	GASKET	2
14	S1615	BOLT	24
	3B4504	LOCKWASHER	24
15	S1585	BOLT	10
	4L7464	GREASE -----(NOT SHOWN)------	4

137237

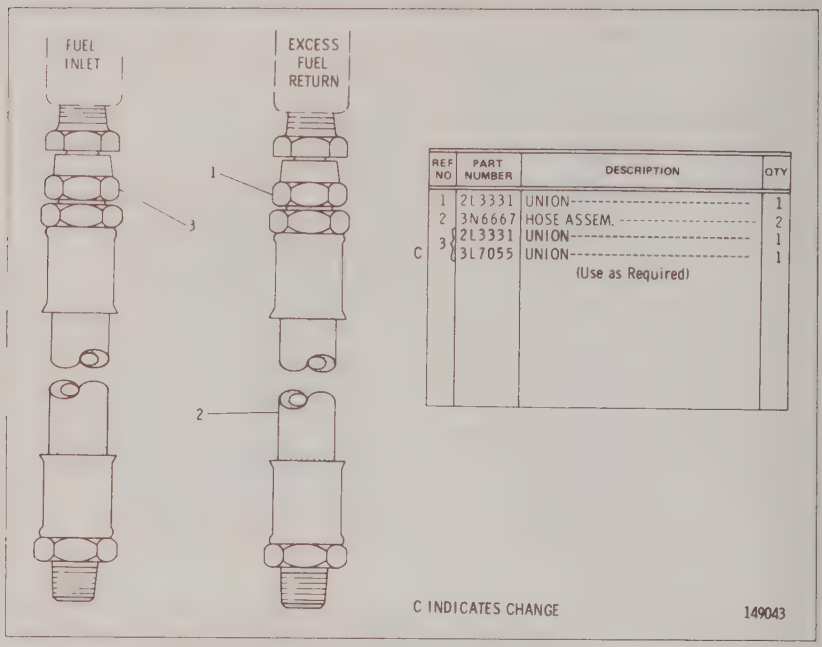
2N9304 FLEXIBLE COUPLING GROUP
Serial No. 46B1558—Up



REF. NO.	PART NUMBER	DESCRIPTION	QTY
1	2A1927	VALVE ASSEM.	1
	2A5779	SEAT	1
2	L1213	GASKET	1
3	3B6496	ELBOW	2
4	2H7254	ELEMENT	2
5	2N2045	HOUSING ASSEM.	1
6	5F1678	SEAL	2
7	3H1778	GASKET	1
8	3B7744	NIPPLE	4
9	L1351	BOLT	4
	1D4717	NUT	4
	3B4506	LOCKWASHER	4
10	2N2046	COUPLING ASSEM.	3
11	2N2047	PIPE	6
12	2H5869	COCK	3
13	5B8979	TEE	3
	3J5389	PLUG	3
		(Not Shown - Use As Required)	

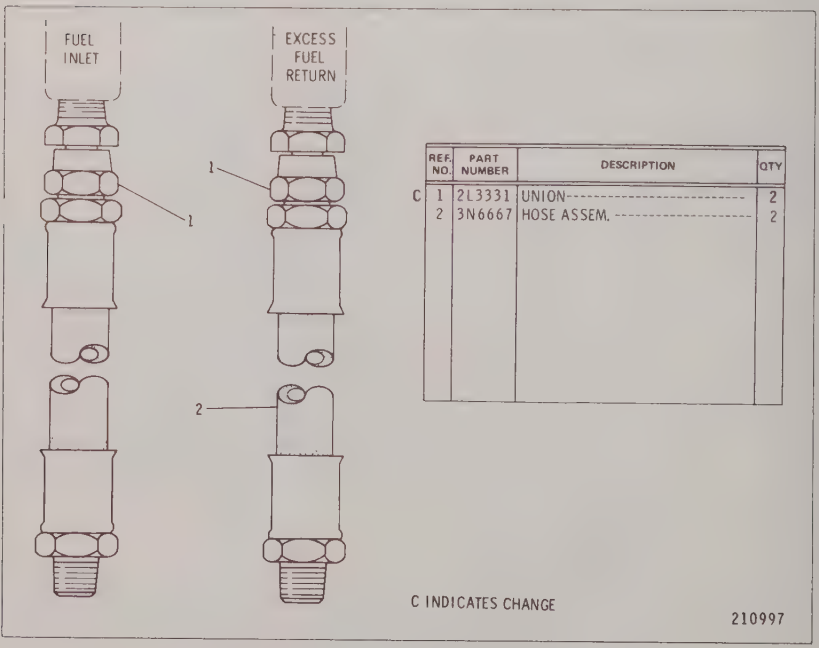
112510

2N2048 CRUDE FUEL FILTER GROUP
Serial No. 46B1558—Up



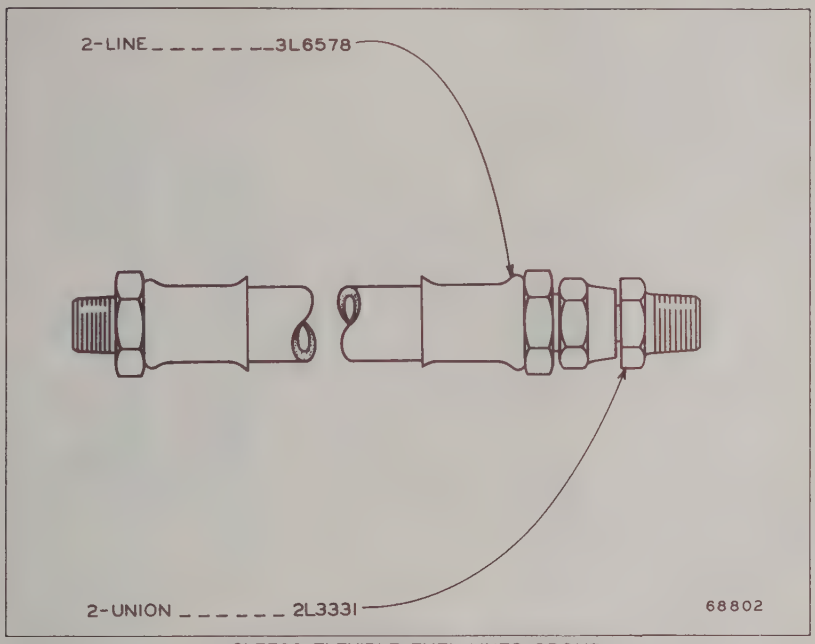
REF NO	PART NUMBER	DESCRIPTION	QTY
1	2L3331	UNION	1
2	3N6667	HOSE ASSEM.	2
3	2L3331	UNION	1
C	3L7055	UNION (Use as Required)	1

3N6668 FLEXIBLE FUEL OIL LINES GROUP—Type 1



REF. NO.	PART NUMBER	DESCRIPTION	QTY
C 1	2L3331	UNION	2
2	3N6667	HOSE ASSEM.	2

3N6668 FLEXIBLE FUEL OIL LINES GROUP—Type 2



2L7786 FLEXIBLE FUEL LINES GROUP
Also part of 2L9321 Generator Installation Group listed on Page 162. Only separate parts serviced. When complete Group is required order 3N6668

SUPPORT	HARD-WARE LIST*	NO. OF SLIDE RAIL GROUPS & HARDWARE REQUIRED
WITHOUT BASE	V	2
SHORT BASE	Y	3

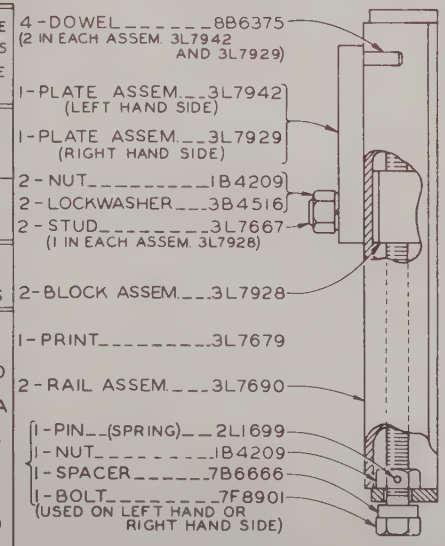
*REQUIRED HARDWARE COMBINATIONS

V

1-BOLT_(.75"X 1.25")_2H3740
2-BOLT_(.75"X 2")_3306-A
3-LOCKWASHER_3B4512

Y

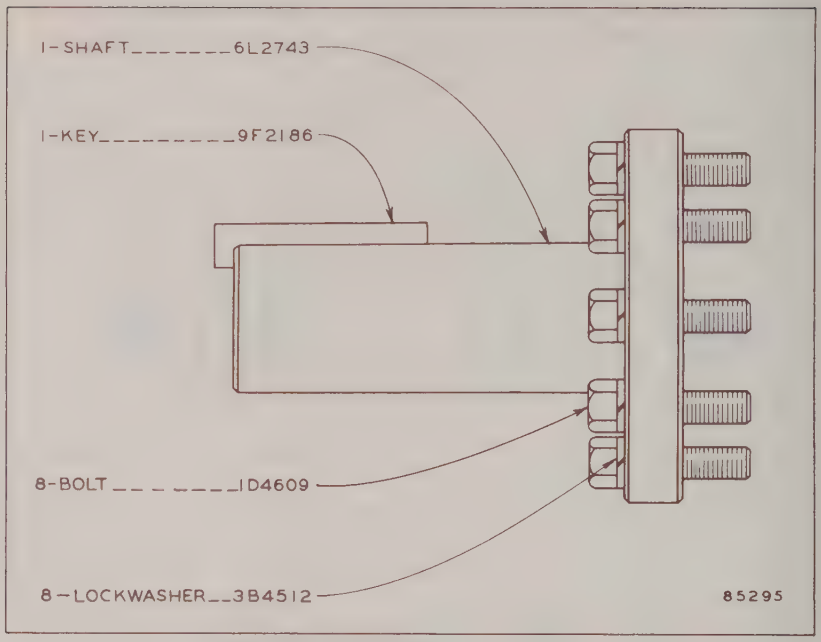
2-BOLT_(.75"X 1.25")_2H3740
2-LOCKWASHER_3B4512



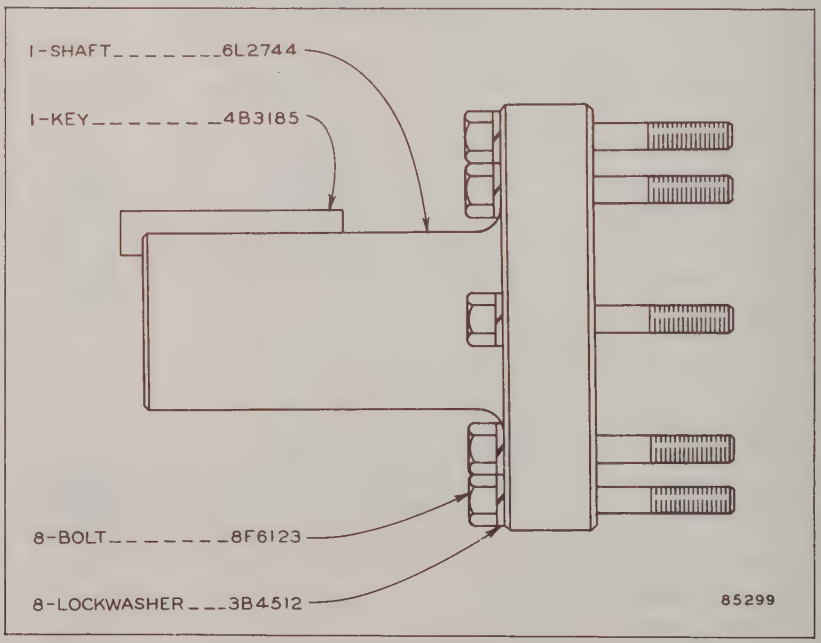
3L7679 SLIDE RAIL GROUP

94240

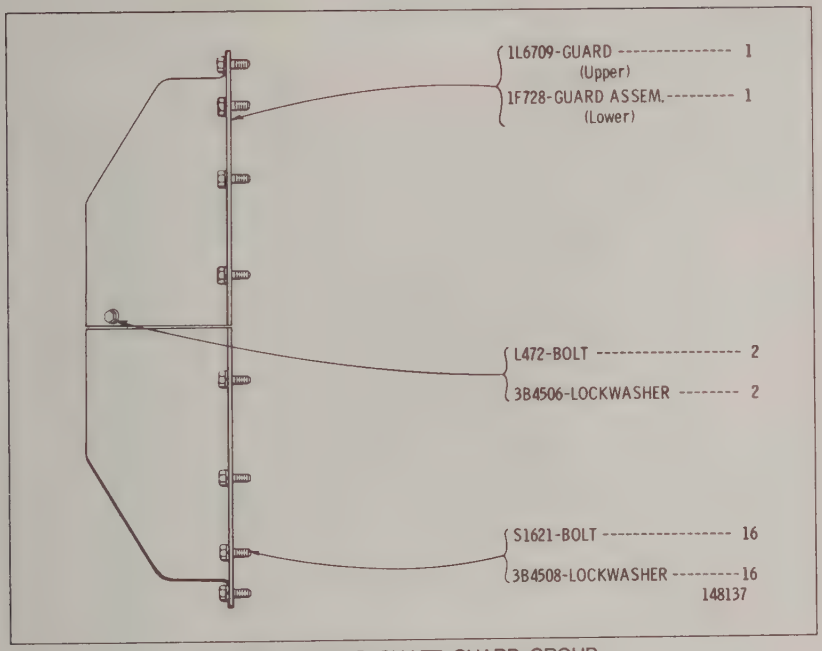
3L7679 SLIDE RAIL GROUP



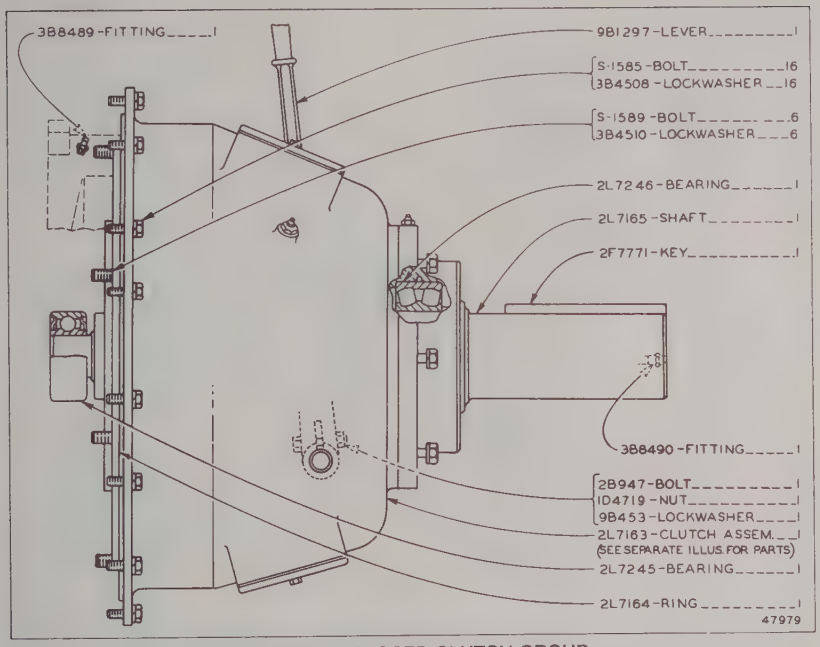
6L2693 STUB SHAFT GROUP—Front Mounted



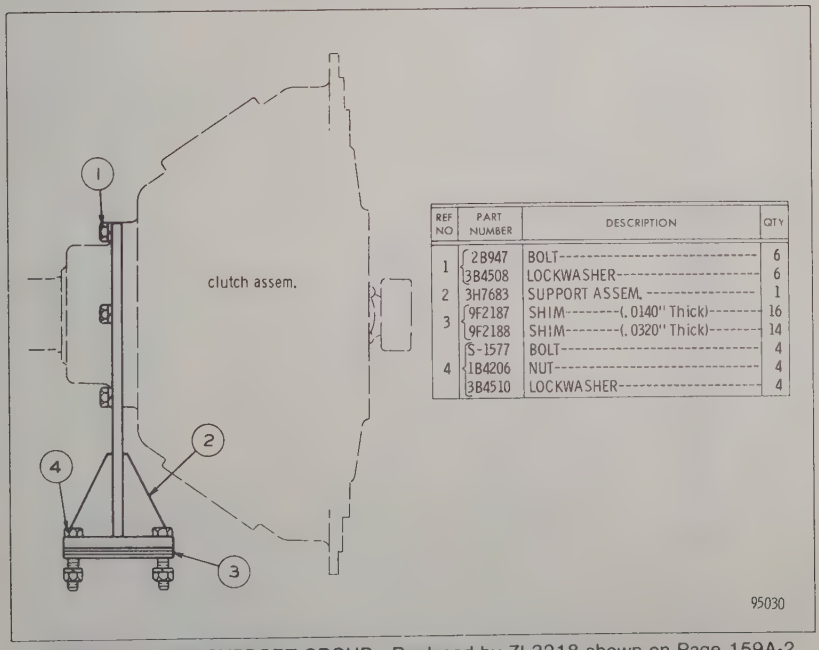
6L2697 STUB SHAFT GROUP—Rear Mounted



3N7779 STUB SHAFT GUARD GROUP

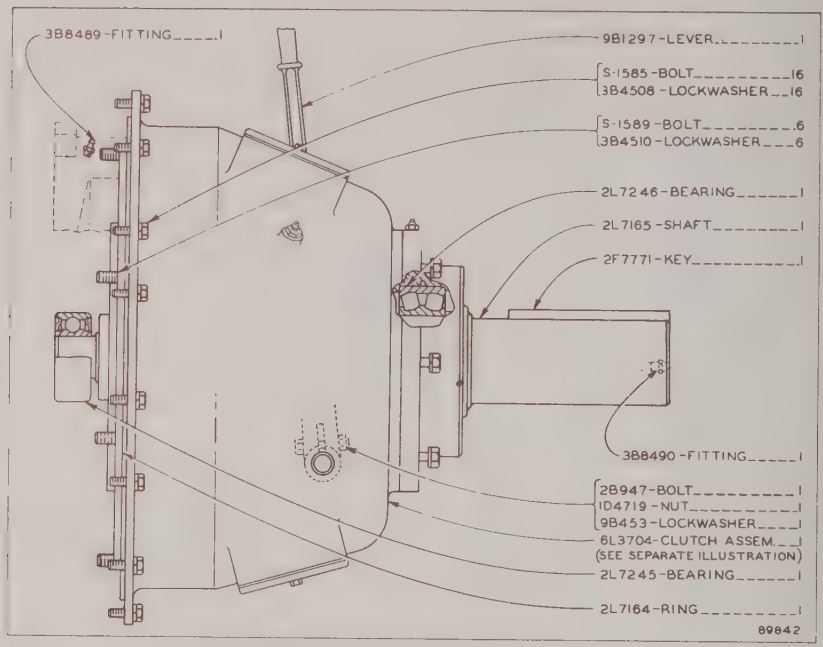


2N7247 ENCLOSED CLUTCH GROUP
Serial No. 46B1558 to 1879, 1881 to 1905, 1907 to 1911, 1913 to 1917, 1919 to 1923, 1925 to 1935, 1938 to 1941, 1949, 1952 and 46B1963 inclusive
2L7163 Clutch parts are shown on Page 160

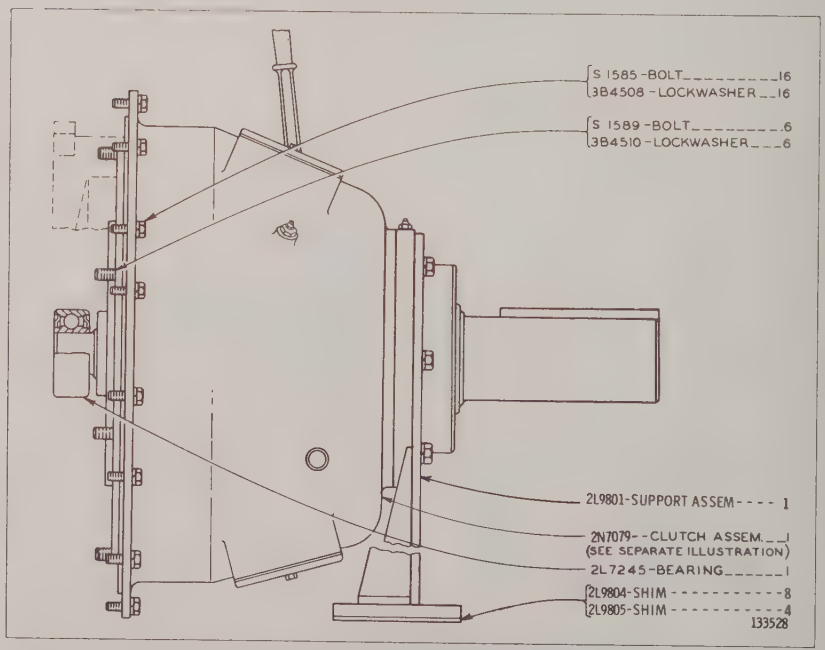


REF NO	PART NUMBER	DESCRIPTION	QTY
1	2B947	BOLT	6
	3B4508	LOCKWASHER	6
2	3H7683	SUPPORT ASSEM.	1
3	9F2187	SHIM-------(.0140" Thick)--------	16
	9F2188	SHIM-------(.0320" Thick)--------	14
4	S-1577	BOLT	4
	1B4206	NUT	4
	3B4510	LOCKWASHER	4

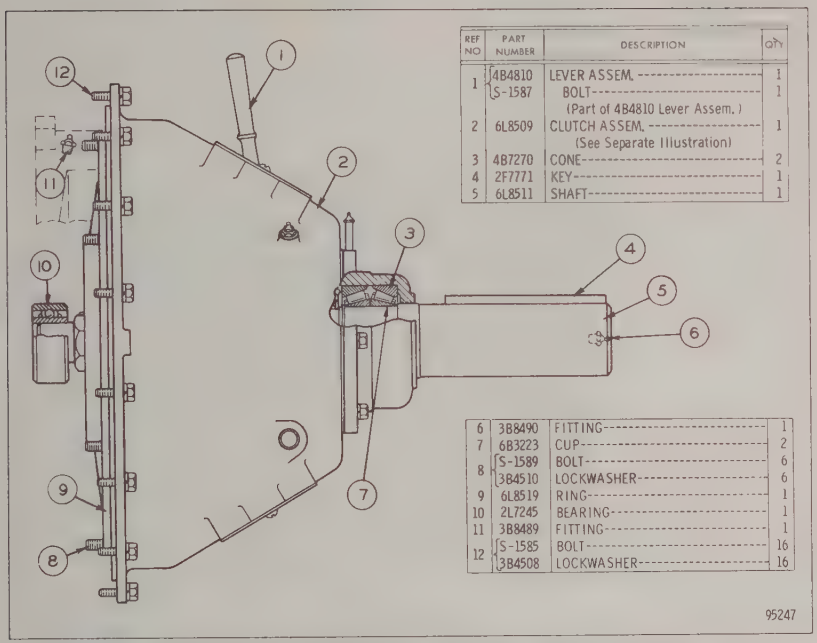
6L9068 CLUTCH SUPPORT GROUP—Replaced by 7L3218 shown on Page 159A-2
Serial No. 46B1880, 1906, 1912, 1918, 1924, 1936, 1937, 1942 to 1948, 1950, 1951, 1953 to 1962 and 46B1964—Up



6L3703 ENCLOSED CLUTCH GROUP—Type 1
Serial No. 46B2437—Up and 77B1—Up
6L3704 Clutch parts are shown on Page 161

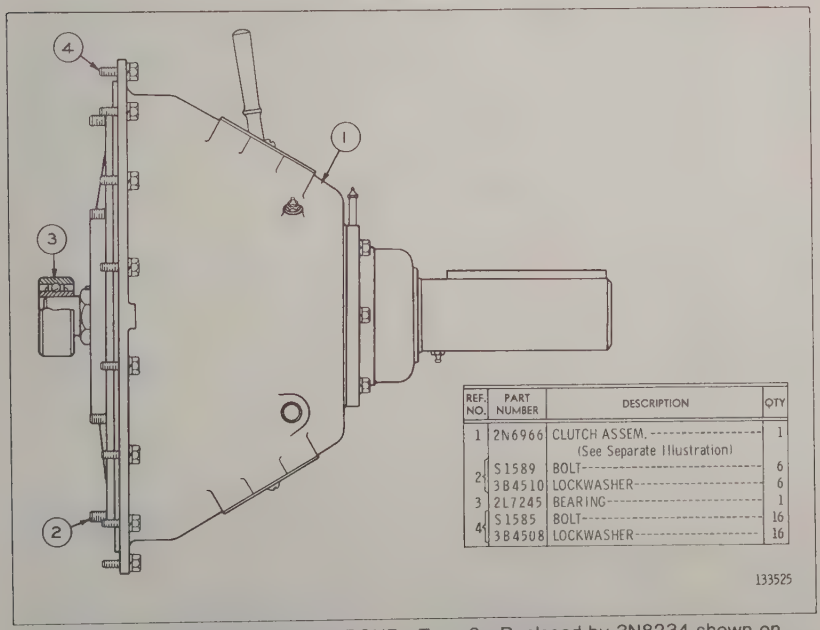


6L3703 ENCLOSED CLUTCH GROUP—Type 2
Effective with Serial No. 46B2437—Up & 77B1—Up
2N7079 Clutch parts are shown on Pages 160A & 160B



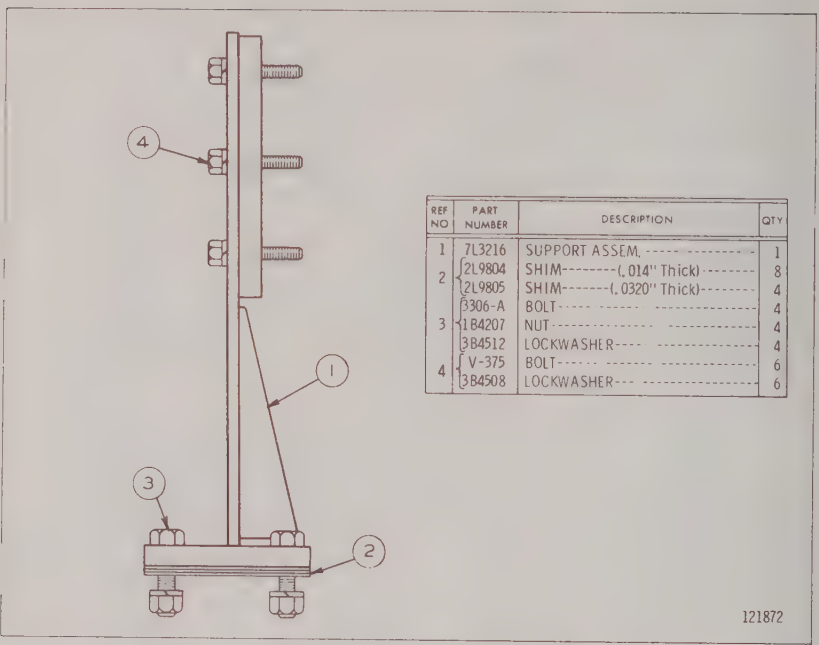
REF NO	PART NUMBER	DESCRIPTION	QTY
1	4B4810	LEVER ASSEM.	1
	S-1587	BOLT	1
		(Part of 4B4810 Lever Assem.)	
2	6L8509	CLUTCH ASSEM.	1
		(See Separate Illustration)	
3	4B7270	CONE	2
4	2F7771	KEY	1
5	6L8511	SHAFT	1
6	3B8490	FITTING	1
7	6B3223	CUP	2
8	S-1589	BOLT	6
	3B4510	LOCKWASHER	6
9	6L8519	RING	1
10	2L7245	BEARING	1
11	3B8489	FITTING	1
12	S-1585	BOLT	16
	3B4508	LOCKWASHER	16

6L8514 ENCLOSED CLUTCH GROUP—Type 1—Replaced by 3N8234 shown on Page 159A-2. Serial No. 46B1880, 1906, 1912, 1918, 1924, 1936, 1937, 1942 to 1948, 1950, 1951, 1953 to 1962 and 46B1964—Up. 6L8509 Clutch parts are shown on Page 159D



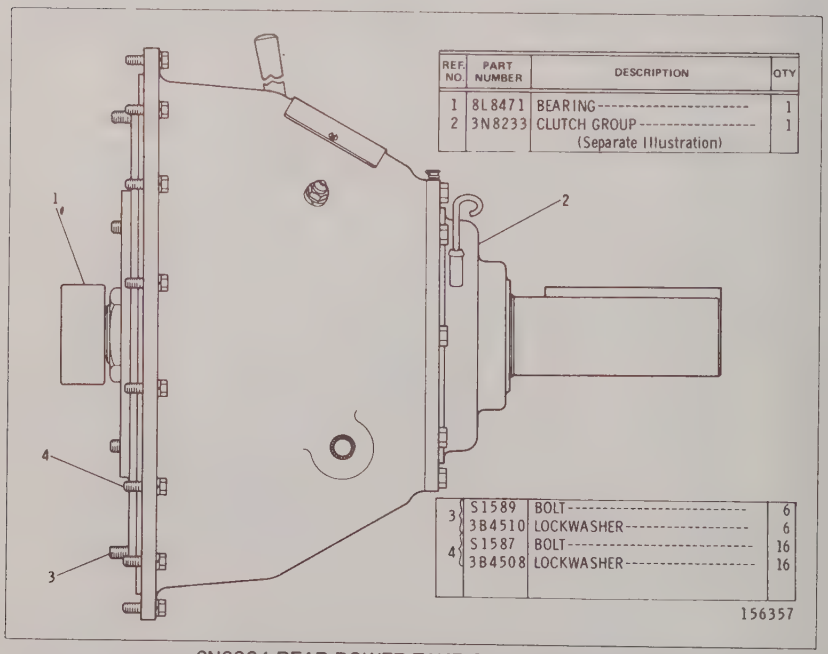
REF. NO.	PART NUMBER	DESCRIPTION	QTY
1	2N6966	CLUTCH ASSEM.	1
		(See Separate Illustration)	
2	S1589	BOLT	6
	3B4510	LOCKWASHER	6
3	2L7245	BEARING	1
4	S1585	BOLT	16
	3B4508	LOCKWASHER	16

6L8514 ENCLOSED CLUTCH GROUP—Type 2—Replaced by 3N8234 shown on Page 159A-2. Serial No. 46B1880, 1906, 1912, 1918, 1924, 1936, 1937, 1942 to 1948, 1950, 1951, 1953 to 1962 and 46B1964—Up. 2N6966 Clutch parts are shown on Page 159C



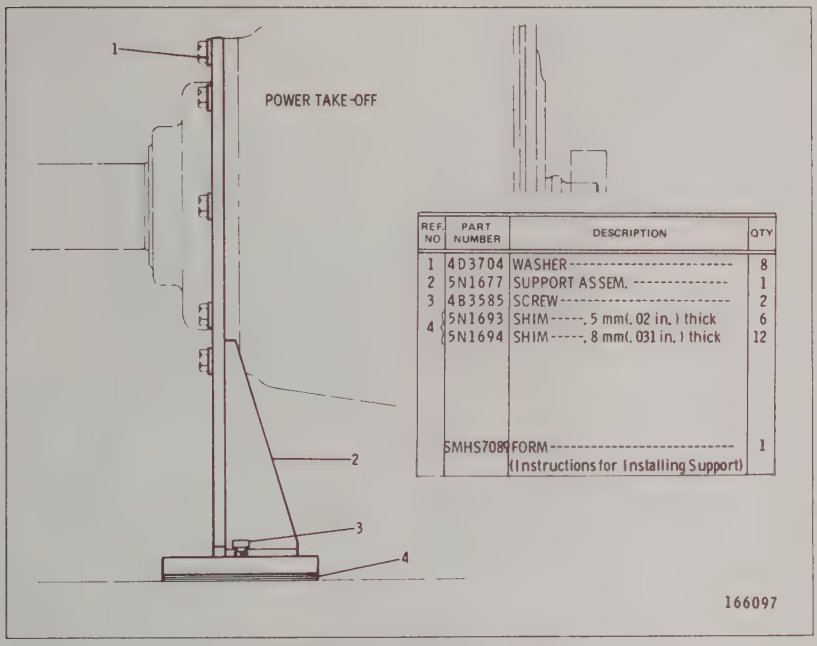
REF NO	PART NUMBER	DESCRIPTION	QTY
1	7L3216	SUPPORT ASSEM.	1
2	2L9804	SHIM--------(.014" Thick)	8
	2L9805	SHIM--------(.0320" Thick)	4
3	3306-A	BOLT	4
	1B4207	NUT	4
	3B4512	LOCKWASHER	4
4	V-375	BOLT	6
	3B4508	LOCKWASHER	6

7L3218 CLUTCH SUPPORT GROUP
Serial No. 46B1880, 1906, 1912, 1918, 1924, 1936, 1937, 1942 to 1948, 1950, 1951, 1953 to 1962 and 46B1964—Up



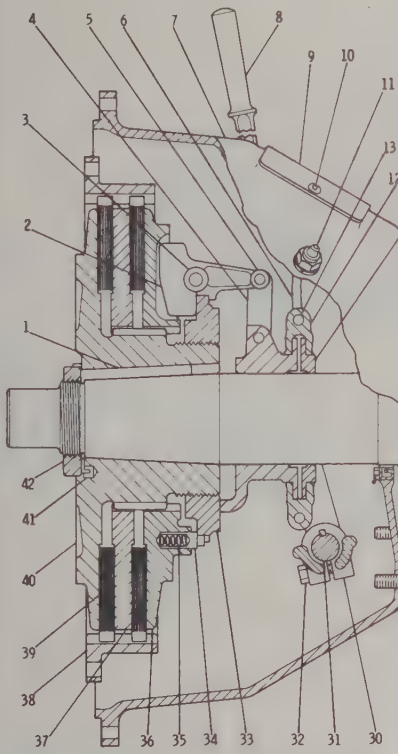
REF. NO.	PART NUMBER	DESCRIPTION	QTY
1	8L8471	BEARING	1
2	3N8233	CLUTCH GROUP (Separate Illustration)	1
3	S1589	BOLT	6
	3B4510	LOCKWASHER	6
4	S1587	BOLT	16
	3B4508	LOCKWASHER	16

3N8234 REAR POWER TAKE OFF GROUP—Clutch
Serial No. 46B1880, 1906, 1912, 1918, 1924, 1936, 1937, 1942 to 1948, 1950, 1951, 1953 to 1962 and 46B1964—Up. 3N8233 Clutch parts are shown on Page 159B



REF. NO	PART NUMBER	DESCRIPTION	QTY
1	4D3704	WASHER	8
2	5N1677	SUPPORT ASSEM.	1
3	4B3585	SCREW	2
4	5N1693	SHIM-----. 5 mm(. 02 in.) thick	6
	5N1694	SHIM-----. 8 mm(. 031 in.) thick	12
	SMHS7089	FORM (Instructions for Installing Support)	1

5N1678 POWER TAKE-OFF SUPPORT GROUP—Clutch
Serial No. 46B1942—Up



REF. NO.	PART NUMBER	DESCRIPTION	QTY
1	7F2167	KEY	1
2	2L4437	LEVER	4
	2L4441	WASHER	8
3	6L3973	PIN	4
	6L3963	COTTER PIN	4
4	4B4760	LINK	8
5	6L3971	PIN	8
	5L3962	COTTER PIN	8
6	8L5096	HOSE ASSEM. ---4, 19 dm(16, 5 in.)	1
7	3N8426	HOUSING	1
	8B7121	FITTING	2
	9B1297	LEVER	1
8	2B947	BOLT	1
	1D4719	NUT	1
9	1N5392	PLATE--------(instructions)------	1
10	1L6931	SCREW ASSEM.	2
	3B8489	FITTING	1
11	9S1354	NUT	1
	6F253	LOCKWASHER	1
	6F6580	COLLAR ASSEM.	1
12		(Includes)	
	4B4723	SHIM	2
13	1L1558	BOLT	2
	2K564	NUT	2

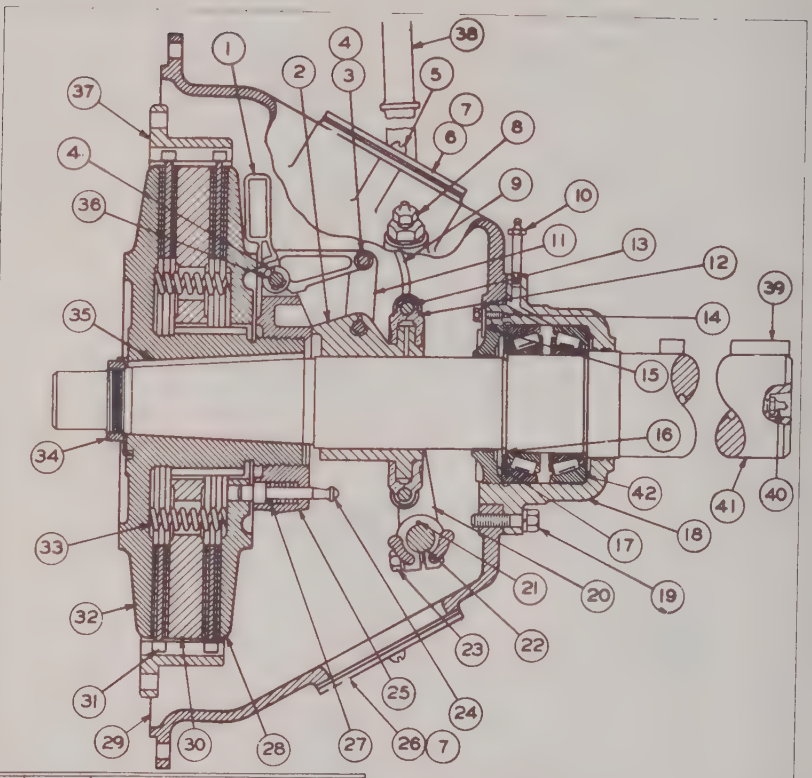
14	3N8429	SLEEVE	1
15	4B350	BREATHER	1
16	S1625	BOLT	8
17	3N8425	GAUGE------(oil level)----------	1
18	3N8427	CARRIER ASSEM.	1
		(Includes)	
19	2F6938	TUBE	1
20	2F7771	KEY	1
21	3N8431	SHAFT	1

22	7L6608	SEAL	2
	7L6607	SLEEVE	2
23	2L6010	PLUG	2
24	5L1545	CUP	2
	7L6551	CONE	2
25	5L3556	SHIM-----.51mm(.02 in.) thick----	1
	5L3557	SHIM----.254mm(.01 in.) thick---	1
	5L3558	SHIM----.178mm(.007 in.) thick--	1
	5L3559	SHIM----12.7mm(.5 in.) thick----	1
26	5L3613	RETAINER	1
	S1594	BOLT	6
	5L3560	PLATE	3
27	3N8428	SLINGER	1
28	5L3617	SEAL	1
29	9F2247	PLUG	1
30	6F6581	YOKE	1
31	6F6582	SHAFT	1
	6L5202	KEY	2
32	1A1460	BOLT	2
33	2L7161	RING	1
34	3N8306	PIN	1
35	3N8124	SPRING	1
36	3N8430	PLATE-------(floating)----------	1
37	2L7162	PLATE-------(center)----------	1
38	6L8519	RING	1
39	6L3705	PLATE ASSEM.	1
40	3N8434	PLATE	1
41	2L7152	WASHER	1
42	2L7151	NUT	1

156360

3N8233 BASIC CLUTCH GROUP

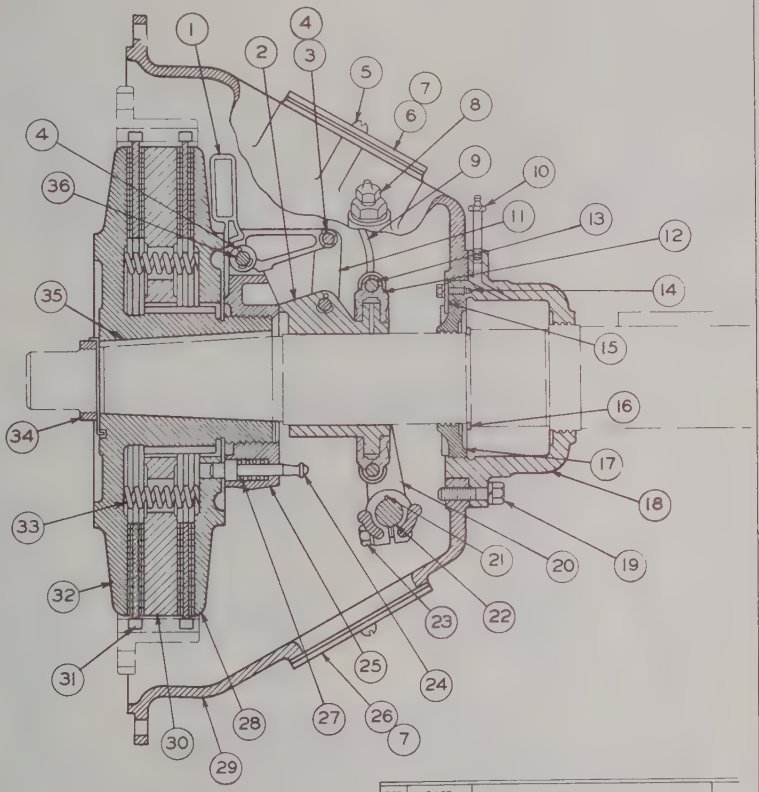
Serial No. 46B1880, 1906, 1912, 1918, 1924, 1936, 1937, 1942 to 1948, 1950, 1951, 1953 to 1962 and 46B1964—Up. Specification No. 35436. Part of 3N8234 Rear Power Take Off Group shown on Page 159A-2



REF NO	PART NUMBER	DESCRIPTION	QTY
1	1H6066	LEVER	4
2	4B4786	SLEEVE	1
3	4B4724	PIN	8
4	3B4615	COTTER PIN	12
5	1L6931	SCREW	4
6	5L9422	PLATE (Instruction)	1
7	2F5375	GASKET	2
8	3B8489	FITTING	1
	9S1354	NUT	1
	6F253	LOCKWASHER	1
9	4B4775	HOSE ASSEM.	1
10	3B8491	FITTING	1
11	4B4760	LINK	8
12	4B4717	COLLAR ASSEM.	1
	4B4723	SHIM	2
13	V 375	BOLT	2
	2K564	NUT	2
14	S 1617	BOLT	1
	3F9556	LOCKWASHER	1
15	5B2407	LOCK	1
16	3F3728	RING	1
17	5B2404	RETAINER	1
18	5B2406	CARRIER	1
19	1A1460	BOLT (2" Long)	4
	S 1587	BOLT (1.75" Long)	2
	3B4508	LOCKWASHER	6
20	4B4796	YOKE	1
21	6L5151	KEY	2
22	4B4770	SHAFT	1
23	S 1591	BOLT	2
	9F5644	LOCKWASHER	2
24	4B4712	PIN	1
25	4B4791	YOKE	1
26	5L9423	PLATE	1
27	T278	SPRING	1
28	4B4809	PLATE (Floating)	1
29	6L9861	HOUSING	1
	8B7121	FITTING	2
30	6L9862	PLATE (Center)	1
31	6L3705	PLATE ASSEM.	2
32	6L9863	PLATE	1
33	7L2314	SPRING	6
34	4B4764	NUT	1
	4B4773	LOCK	1
35	6L9860	KEY	1
36	1H6067	PIN	4
37	6L8519	RING	1
38	4B4810	LEVER ASSEM.	1
	S 1587	BOLT	1
39	2F7771	KEY	1
40	3B8490	FITTING	1
41	6L8511	SHAFT	1
42	6B3223	CUP	2
	4B7270	CONE	2

133527

2N6966 FLYWHEEL CLUTCH ASSEMBLY—Replaced by 3N8233 shown on Page 159B
Specification No. 33597
Part of 6L8514 Enclosed Clutch Group shown on Page 159A-1



REF NO	PART NUMBER	DESCRIPTION	QTY.
1	1H6066	LEVER	4
2	4B4786	SLEEVE	1
3	4B4724	PIN	8
4	3B4615	COTTER PIN	12
5	1L6931	SCREW	4
6	5L9422	PLATE-(Instruction)	1
7	2F5375	GASKET	2
8	3B8489	FITTING	1
	9S1354	NUT	1
	6F253	LOCKWASHER	1
9	4B4775	HOSE	1
10	3B8491	FITTING	1
11	4B4760	LINK	8
12	4B4717	COLLAR ASSEM.	1
	4B4723	SHIM	2
13	V 375	BOLT	2
	2K564	NUT	2
		(Parts of 4B4717 Collar Assem.)	
14	S 1617	BOLT	1
	3F9556	LOCKWASHER	1
15	5B2407	LOCK	1
16	3F3728	RING	1
17	5B2404	RETAINER	1

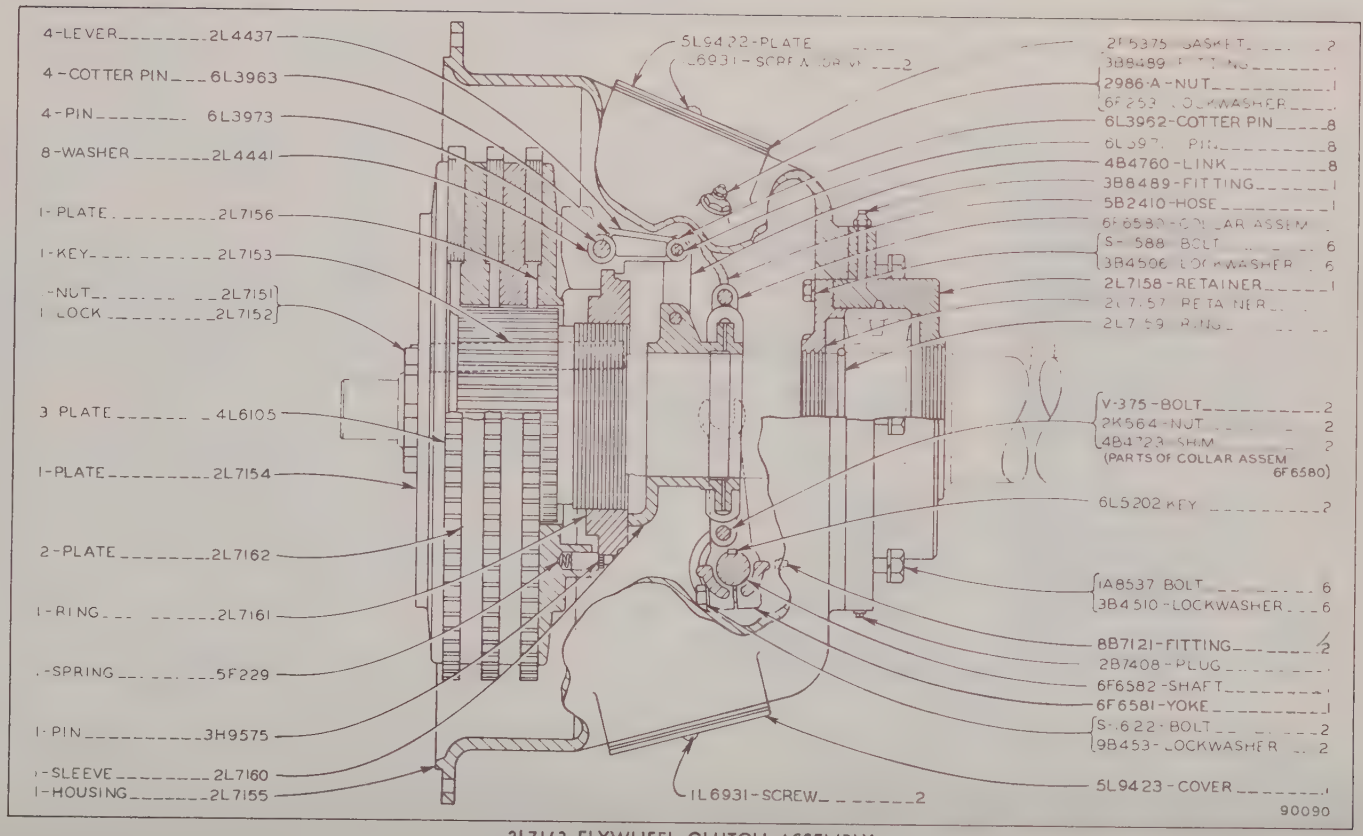
REF NO	PART NUMBER	DESCRIPTION	QTY
18	5B2406	CARRIER	1
19	1A1460	BOLT-(2" Long)	4
	S 1587	BOLT-(1.75" Long)	2
	3B4508	LOCKWASHER	6
20	4B4796	YOKE	1
21	6L5151	KEY	2
22	4B4770	SHAFT	1
23	S 1591	BOLT	2
	9F5644	LOCKWASHER	2
24	4B4712	PIN	1
25	4B4791	YOKE	1
26	5L9423	PLATE	1
27	T 278	SPRING	1
28	4B4809	PLATE-(Floating)	1
29	6L9861	HOUSING	1
	8B7121	FITTING	2
30	6L9862	PLATE-(Center)	1
31	6L3705	PLATE	2
32	6L9863	PLATE	1
33	7L2314	SPRING	6
34	4B4764	NUT	1
	4B4773	LOCKWASHER	1
35	6L9860	KEY	1
36	1H6067	PIN	4

133526

6L8509 FLYWHEEL CLUTCH ASSEMBLY

Specification No. 31322

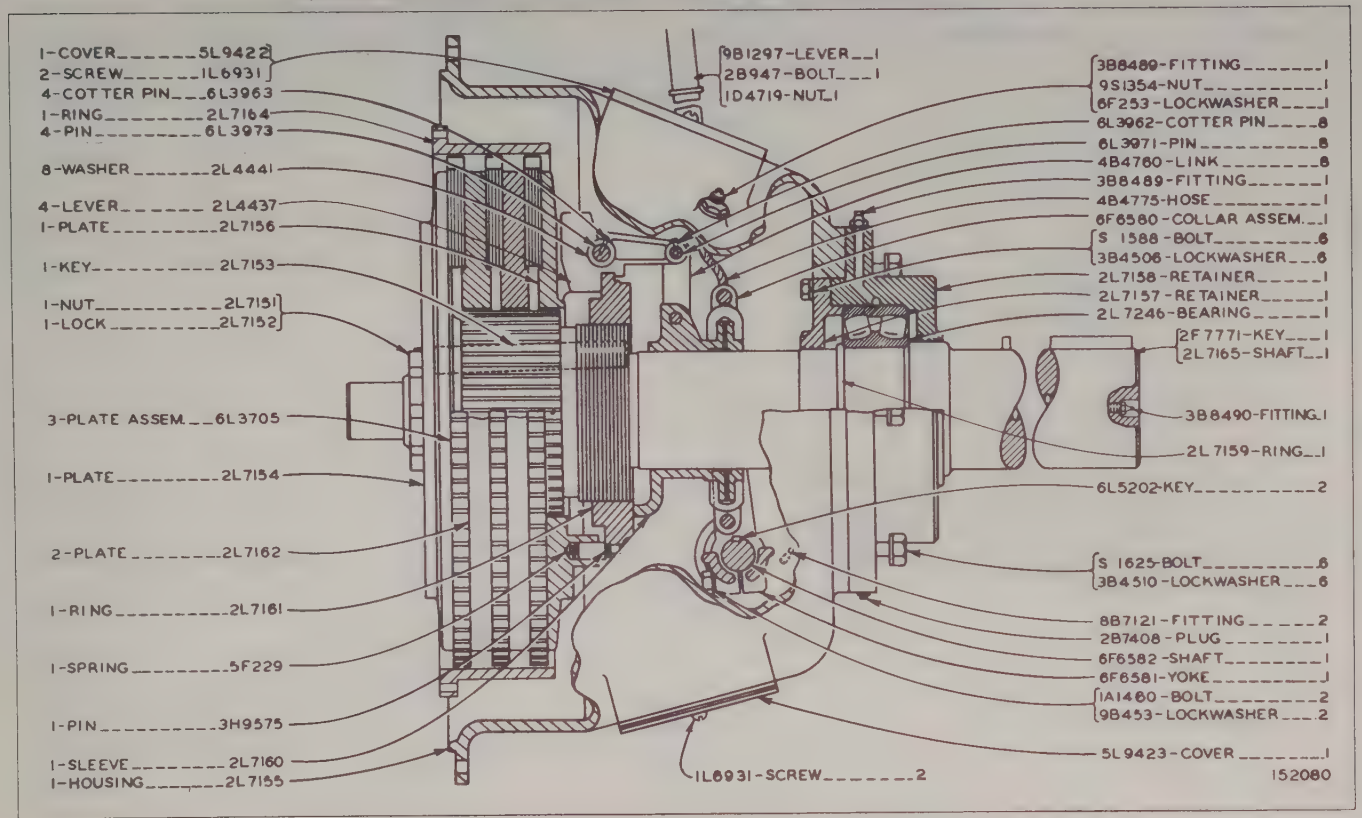
Part of 6L8514 Enclosed Clutch Group shown on Page 159A-1

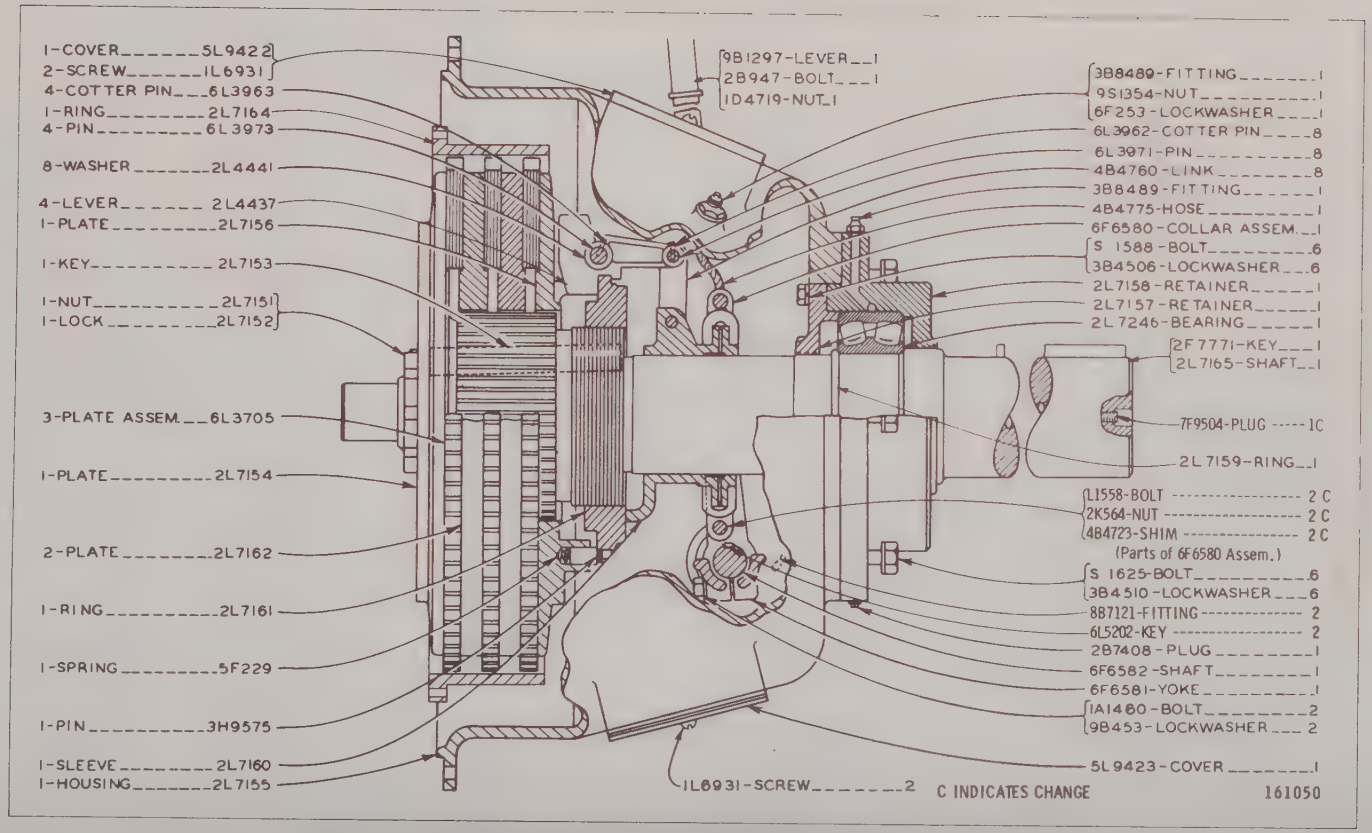


2L7163 FLYWHEEL CLUTCH ASSEMBLY
Specification No. 26474
Part of 2L7247 Enclosed Clutch Group shown on Page 159

2N7079 FLYWHEEL CLUTCH ASSEMBLY—Type 1

Specification No. 33598. Part of 6L3703 Enclosed Clutch Group shown on Page 159A





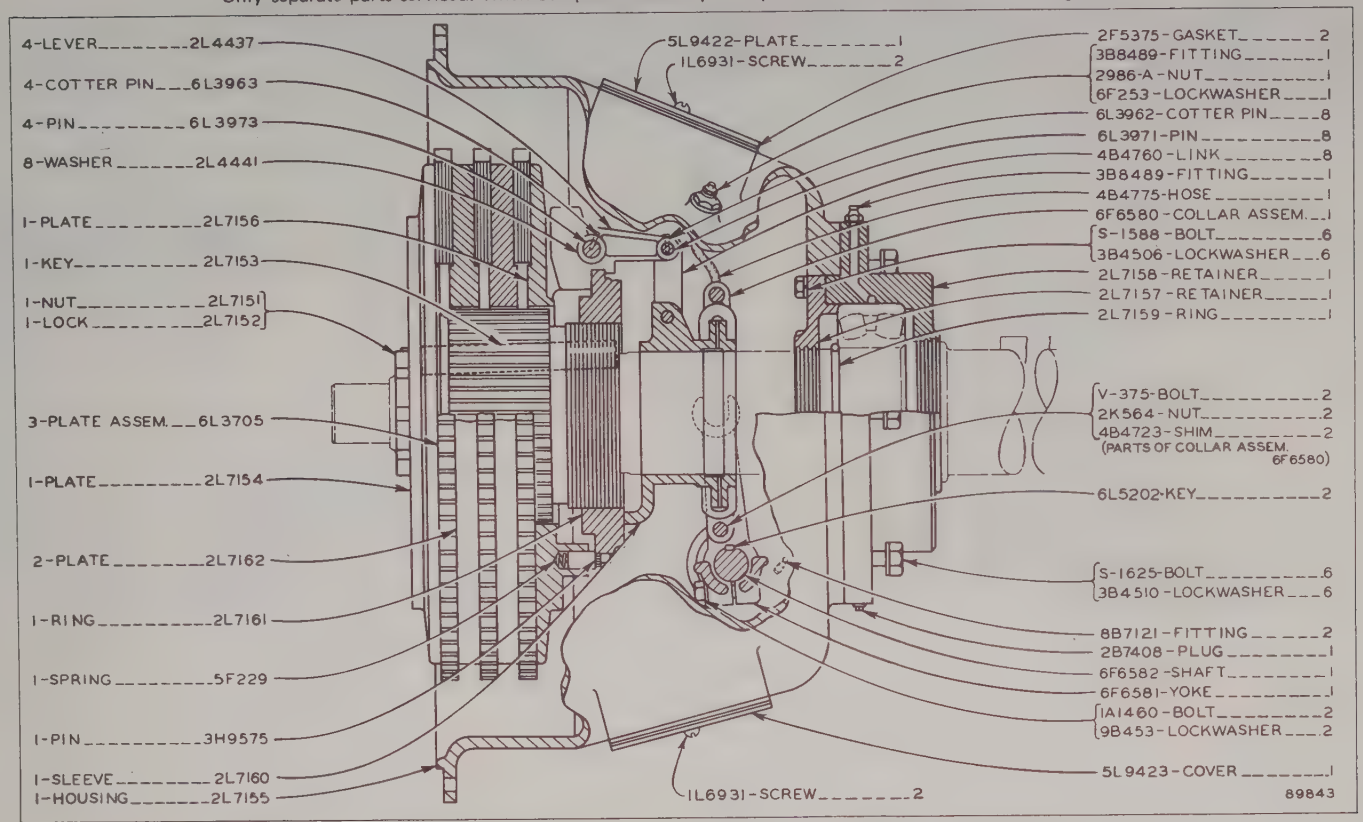
2N7079 FLYWHEEL CLUTCH ASSEMBLY—Type 2
Specification No. 33598
Part of 6L3703 Enclosed Clutch Group shown on Page 159A

6L3704 FLYWHEEL CLUTCH ASSEMBLY

Specification No. 30376

Part of 6L3703 Enclosed Clutch Group shown on Page 159A

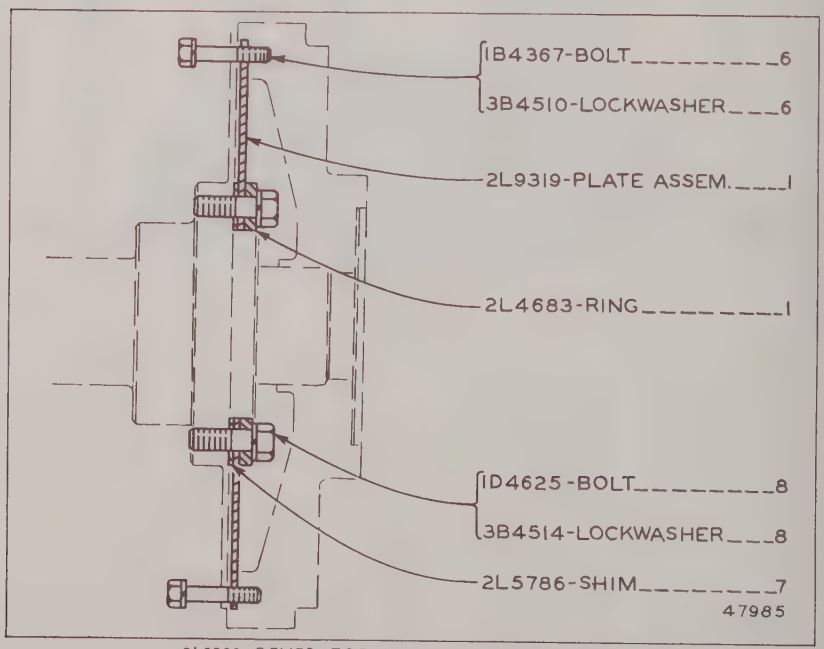
Only separate parts serviced. When complete Assembly is required order 2N7079 shown on Page 160A



	Consists of:		Page
* 1	2L7786	Flexible Fuel Lines Group	157
1	2L9328	Coupling Group	162
16	1A1460	Bolt—Generator to Engine	
16	3B4508	Lockwasher—½"	
1	6F1976	Generator Connections Group	

* Not required with 5L1465 Base and Fuel Tank Group

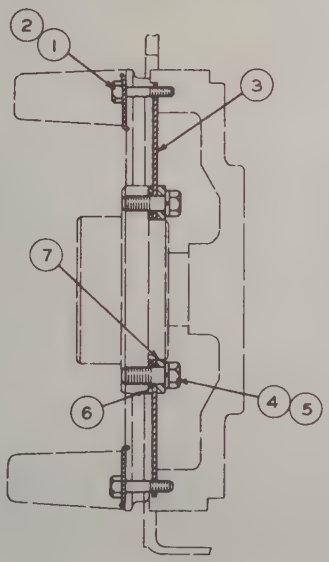
2L9321 GENERATOR INSTALLATION GROUP
For mounting Century Generator



2L9328 GENERATOR DRIVE COUPLING GROUP
Part of 2L9321 Generator Installation Group

		CONSISTS OF:	PAGE
1	7L5437	GENERATOR DRIVE COUPLING GROUP	162A
16	2M849	WASHER--GENERATOR TO ENGINE	
16	S1585	BOLT--GENERATOR TO ENGINE	

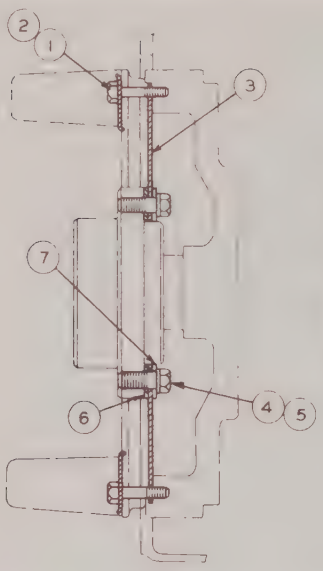
7L5682 GENERATOR INSTALLATION ARRANGEMENT
Serial No. 46B1558—Up. Note: A Governor Group, Governor Control Group and Generator are required but not called for



REF NO	PART NUMBER	DESCRIPTION	QTY
1	1B4367	BOLT	6
2	7L5436	LOCK	6
3	2L9319	PLATE ASSEM.	1
4	1D4625	BOLT	8
5	3B4514	LOCKWASHER	8
6	2L5786	SHIM	6
7	2L4683	RING	1

97565

7L5437 GENERATOR DRIVE COUPLING GROUP—Type 1
Part of 7L5682 Generator Installation Arrangement



REF NO	PART NUMBER	DESCRIPTION	QTY
1	1B4367	BOLT	6
2	7L5436	LOCK	6
3	2L9319	PLATE ASSEM	1
4	1D4625	BOLT	8
5	3B4514	LOCKWASHER	8
6	2L5786	SHIM	6
C 7	9H1031	WASHER	8

C INDICATES CHANGE

138159

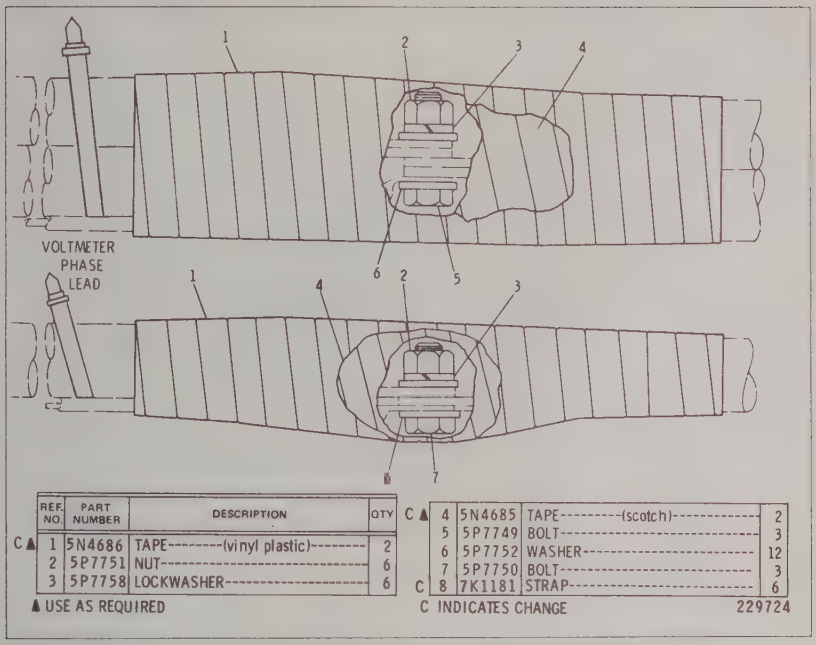
7L5437 GENERATOR DRIVE COUPLING GROUP—Type 2
Part of 7L5682 Generator Installation Arrangement listed on Page 162A

FOR 8L93 GENERATOR GROUP SERIAL NO. M57TH3200-UP

CONSISTS OF:

2	2L4849	TUBE--INSULATING
2	2L5592	TUBE--INSULATING
3	2L2074	SPRING
1	4L6677	BEARING--BALL
2	5L7189	HOLDER ASSEMBLY--BRUSH
4	5L7191	BRUSH--ALTERNATOR
1	6L3590	RECTIFIER--POWER
1	6L3600	RECTIFIER--POWER
1	6L9660	RECTIFIER--SILICON CONTROLLED
2	7L2770	RECTIFIER--BLOCKING
12	7L6750	FUSE--70 AMP., 600 VOLT
2	7L8032	RECTIFIER--BUILD UP
1	8L4276	REGULATOR ASSEMBLY--VOLTAGE
1	8L4863	VOLTAGE SUPPRESSOR--DIODE FIELD
1	8L4873	VOLTAGE SUPPRESSOR--DIODE PHASE
1	8L5823	RELAY--VOLTAGE BUILD UP

5N3724 MARINE SOCIETY GENERATOR SPARE PARTS KIT
AN ATTACHMENT



	REF. NO.	PART NUMBER	DESCRIPTION	QTY
C▲	1	5N4686	TAPE--------(vinyl plastic)--------	2
	2	5P7751	NUT----------	6
	3	5P7758	LOCKWASHER----------	6

C▲	4	5N4685	TAPE---------(scotch)----------	2
	5	5P7749	BOLT----------	3
	6	5P7752	WASHER----------	12
	7	5P7750	BOLT----------	3
C	8	7K1181	STRAP----------	6

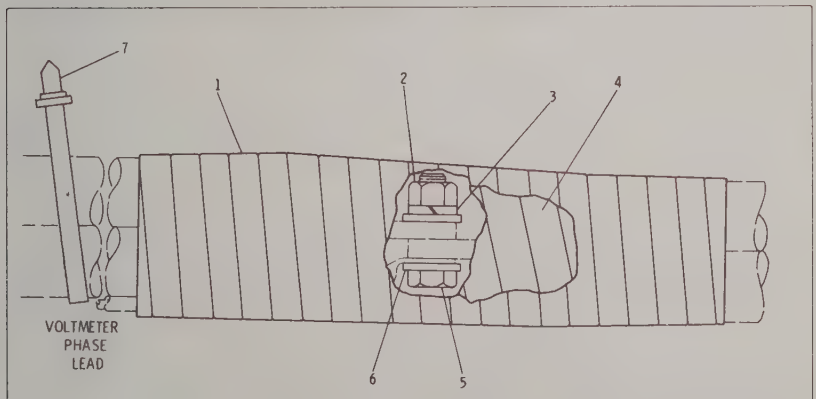
▲ USE AS REQUIRED

C INDICATES CHANGE

229724

5N4127 GENERATOR LEADS CONNECTION GROUP

Note: Provides a connection group that can be used to connect thirty lead generators for high voltage applications. AN ATTACHMENT



	REF. NO.	PART NUMBER	DESCRIPTION	QTY
C▲	1	5N4686	TAPE--------(vinyl plastic)--------	2
	2	5P7751	NUT----------	3
	3	5P7758	LOCKWASHER----------	3

C▲	4	5N4685	TAPE---(varnished cambric)------	2
	5	5P7749	BOLT----------	3
	6	5P7752	WASHER----------	6
C	7	7K1181	STRAP----------	6

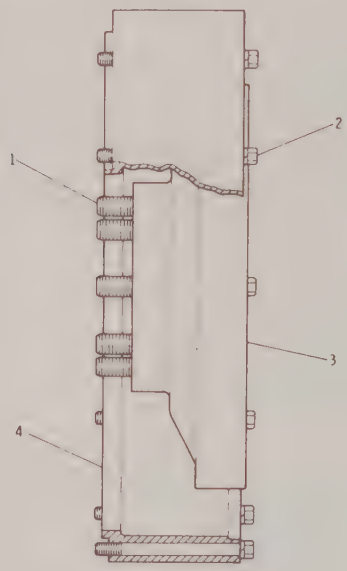
C INDICATES CHANGE

▲ USE AS REQUIRED

229725

5N4128 GENERATOR LEADS CONNECTION GROUP

Note: Provides a connection group that can be used to connect thirty lead generators for low voltage application. AN ATTACHMENT



REF NO	PART NUMBER	DESCRIPTION	QTY
1	3B2968	BOLT	8
	3K3008	LOCK--4.25 in. (1.08 dm) long	3
	5M3351	LOCK--4.55 in. (1.16 dm) long	1
2	8F6419	BOLT	9
	3B4507	LOCKWASHER	9
3	4L9966	COUPLING	1
4	6L6048	ADAPTER	1

154253

3N5846 HYDRAULIC PUMP DRIVE MOUNTING GROUP
FOR USE WITH MARINE GENERATOR SET
AN ATTACHMENT

REPLACEMENT PARTS FOR GENERATORS

Only those generators which are sold and serviced exclusively by "Caterpillar" Dealers are illustrated on the following pages.

Externally-regulated "Caterpillar" Diesel Electric Sets are equipped with generators made by other manufacturers. Parts for these generators are NOT serviced by Caterpillar Tractor Co. Parts lists and parts should be ordered from the manufacturer whose name is shown on the Generator Name Plate, always giving the generator rating and serial number shown.

PIECES DE RECHANGE POUR GENERATRICES

Dans les pages suivantes, nous ne décrivons que les génératrices constante dont la vente et la réparation est assurée par les concessionnaires Caterpillar.

Les Groupes électrogènes Caterpillar à régulation externe sont équipés de génératrices fabriquées par d'autres constructeurs. Les pièces pour ces génératrices ne sont pas fournies par Caterpillar Tractor Co. Il convient donc de s'adresser au constructeur dont le nom figure sur la plaque de la génératrice pour toutes les listes de pièces et pour les commandes de pièces, en indiquant la puissance et le numéro de série de la génératrice.

REPUESTOS PARA GENERADORES

En las páginas siguientes solamente se ilustran los generadores que son vendidos y reparados exclusivamente por los Distribuidores Caterpillar.

Los Grupos Electrógenos "Caterpillar" de regulación externa están equipados con generadores de otros fabricantes. Caterpillar Tractor Co. no suministra repuestos para estos generadores. Las listas de repuestos y los repuestos mismos deberán pedirse al fabricante cuyo nombre aparece en la placa de identificación del generador, indicando siempre la capacidad de éste y su número de serie indicado.

PECAS DE SUBSTITUICAO PARA GERADORES

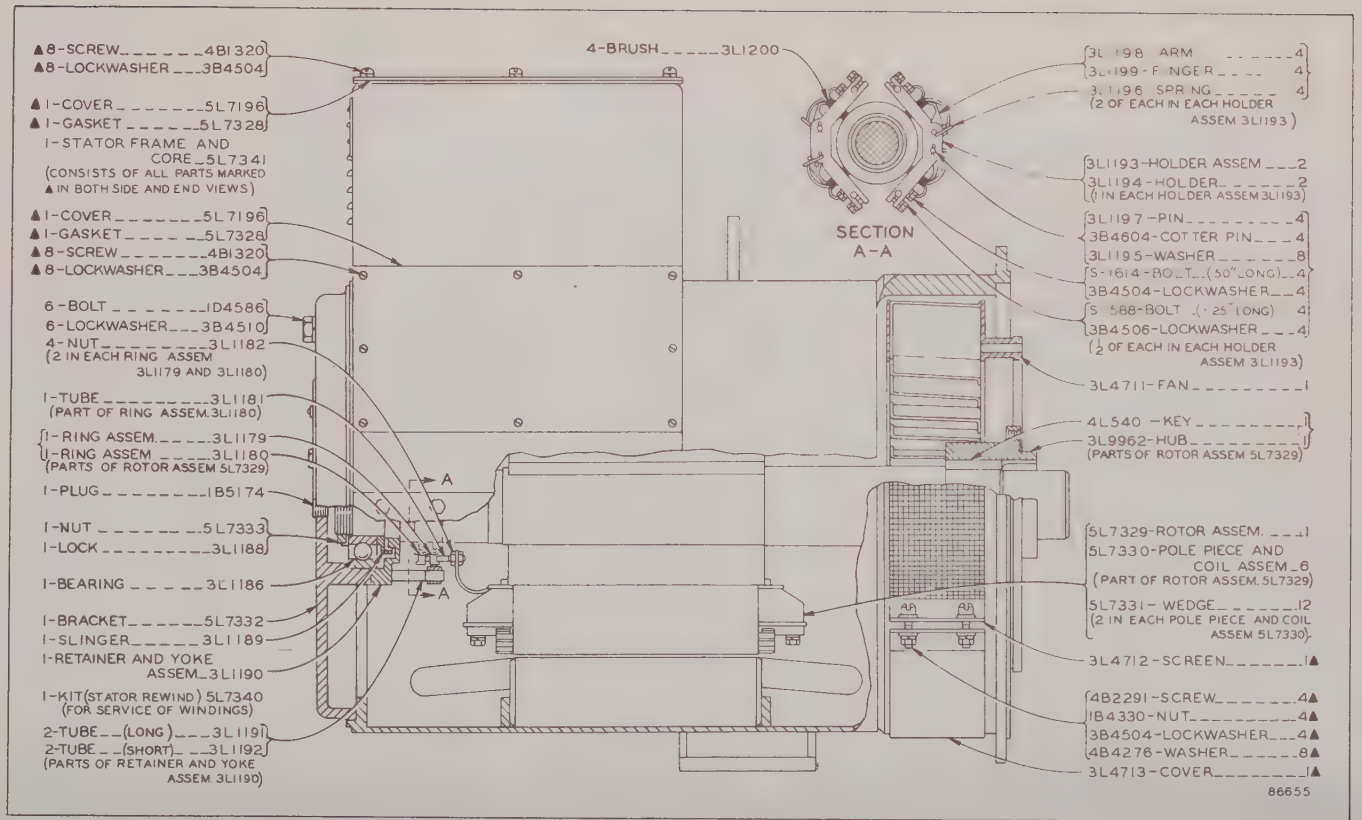
Estão ilustrados nas páginas seguintes sòmente os geradores vendidos e assistidos exclusivamente pelos revendedores Caterpillar.

As peças de substituição para os geradores dos Grupos Eletrógenos Caterpillar regulados externamente são fabricadas por outras firmas e não são fornecidas pela Caterpillar Tractor Co. Para obter qualquer delas, bem como os catálogos de peças, dirija-se à firma cujo nome aparece na chapa de identificação do gerador, acrescentando no pedido as especificações e o número de série do gerador.

ERSATZTEILE FÜR GENERATOREN

Nur diejenigen Generätoren welche ausschliesslich von CATERPILLAR Händlern verkauft und gewartet werden, sind auf den folgenden Seiten dargestellt.

Caterpillar Dieselstromaggregate mit Fremdregelung sind mit Generatoren ausgerüstet, die von anderen Herstellern erzeugt werden. Ersatzteile für solche Generatoren werden NICHT auf Grund von Caterpillar Ersatzteillisten geliefert, sondern müssen jeweils bei dem auf dem Firmenschild angegebenen Hersteller des Generators unter Angabe der Leistung und Seriennummer desselben bestellt werden.

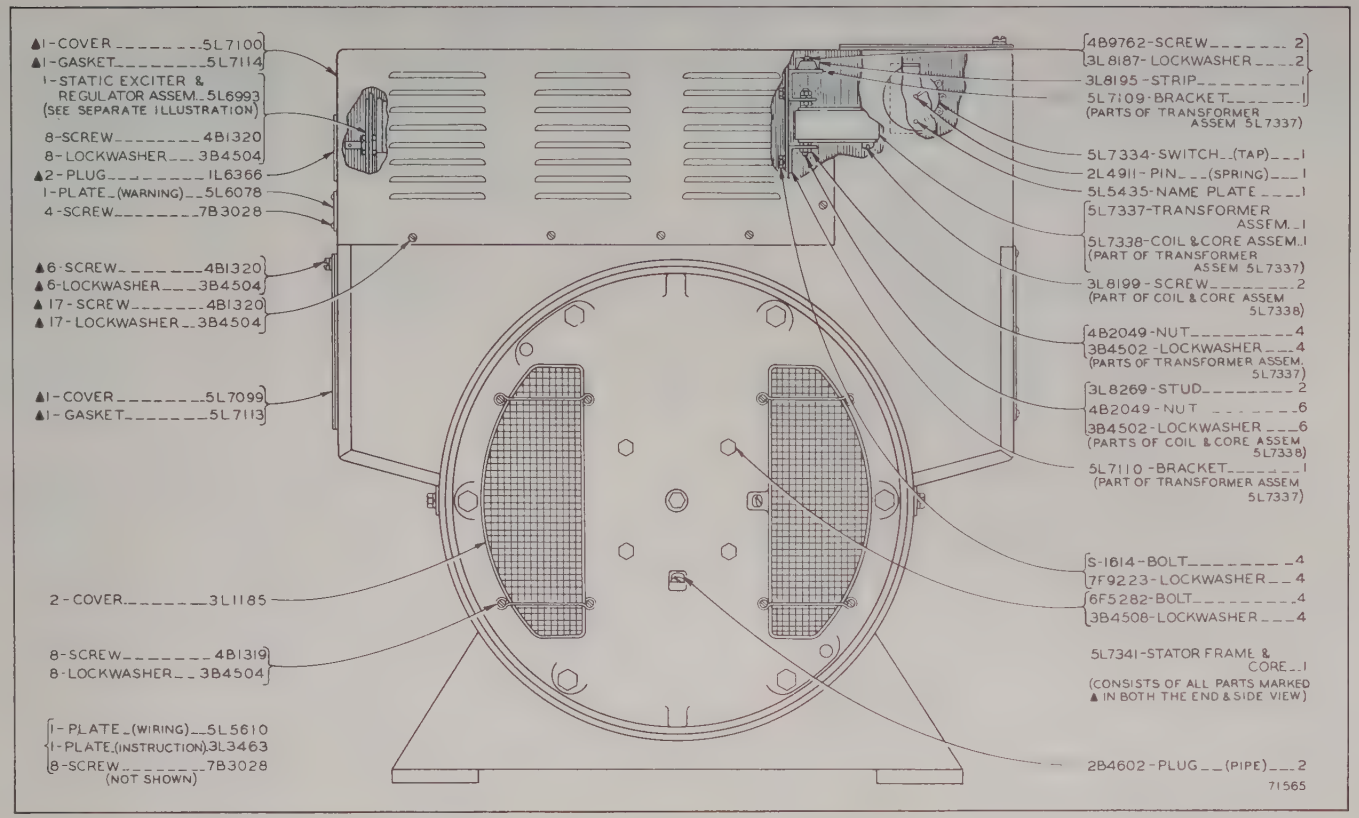


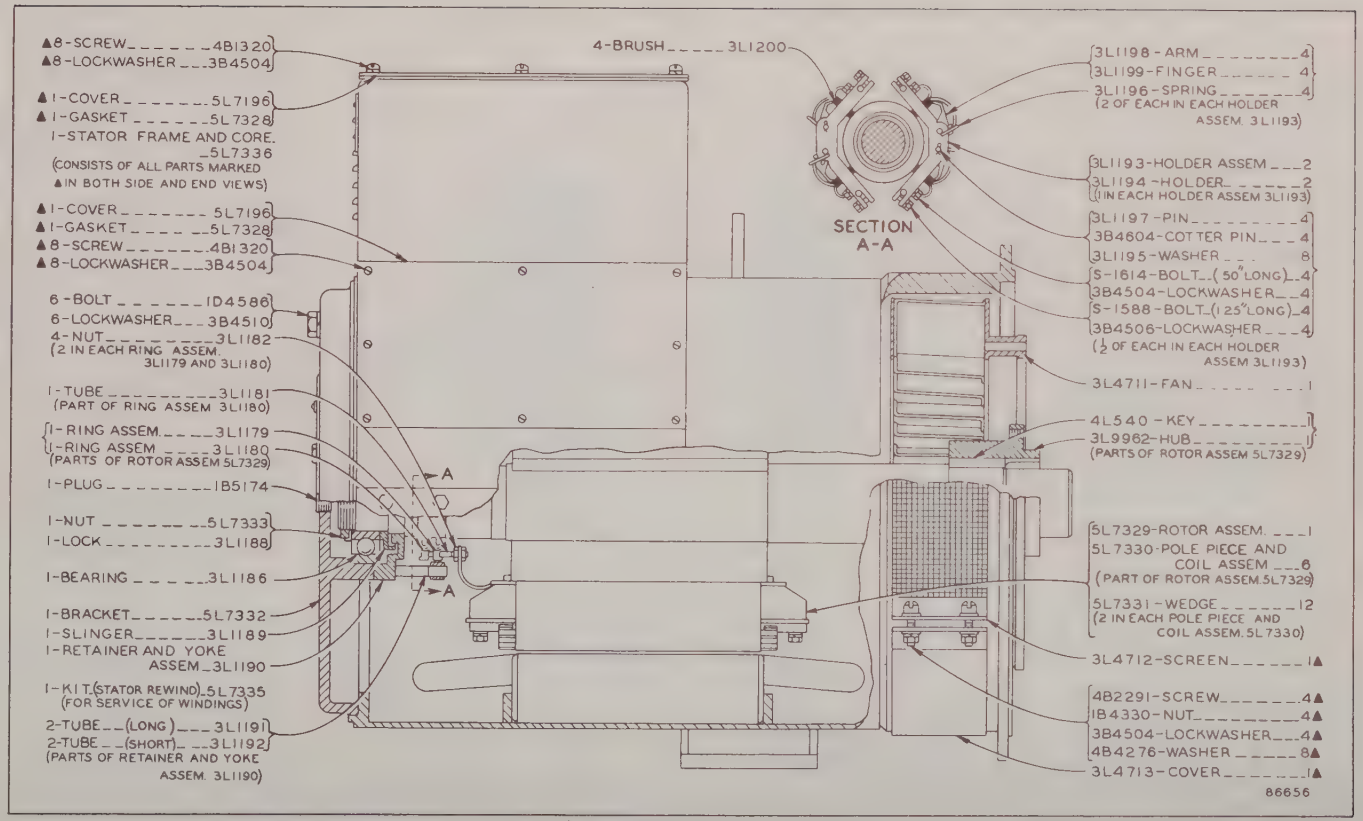
5L3901 GENERATOR—120/208 Volt—60 Cycle, 3 Phase—Side View
Effective with Generator Serial No. 250S51

5L3901 GENERATOR—120/208 Volt—60 Cycle, 3 Phase—End View

Effective with Generator Serial No. 250SS1

5L6993 Static Exciter and Regulator Assembly parts are shown on Pages 170 and 171



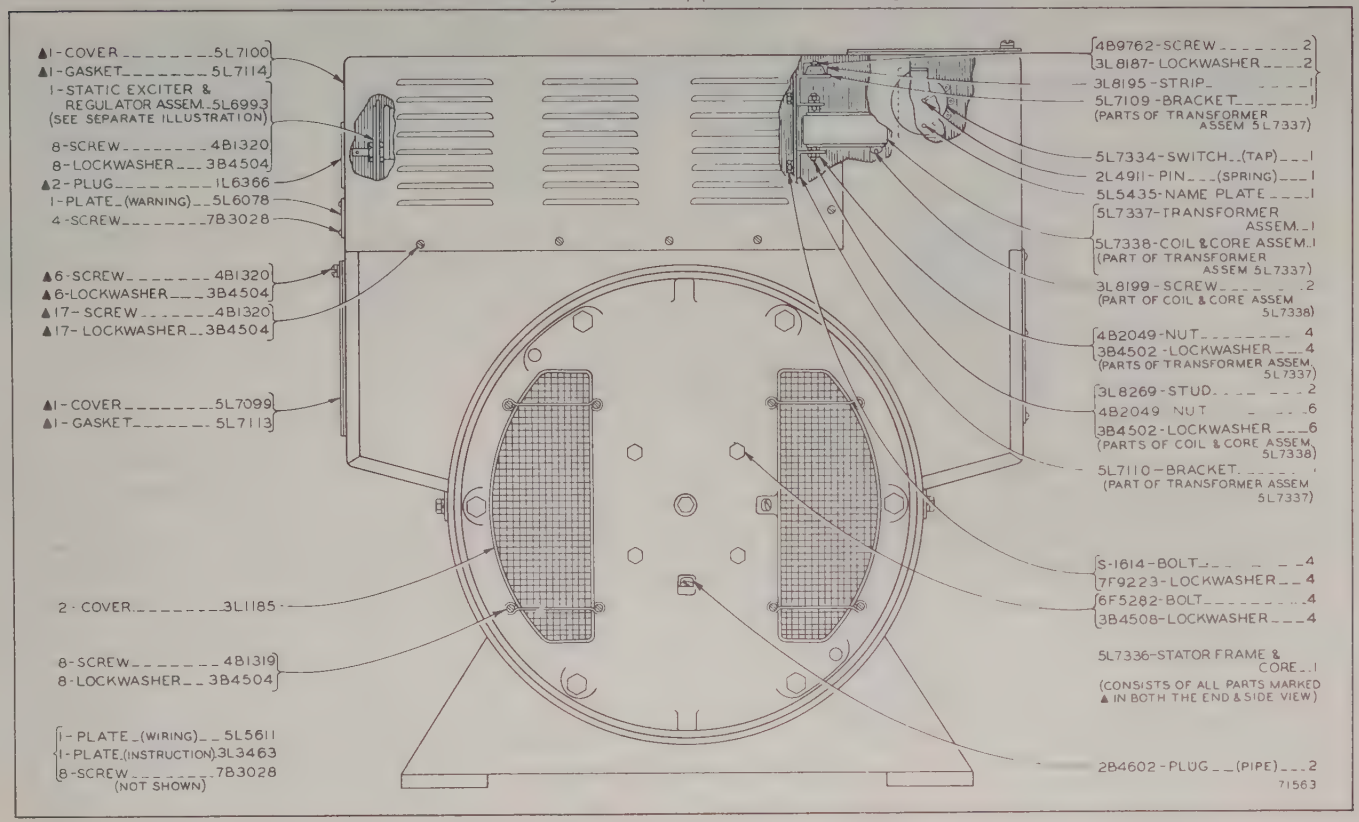


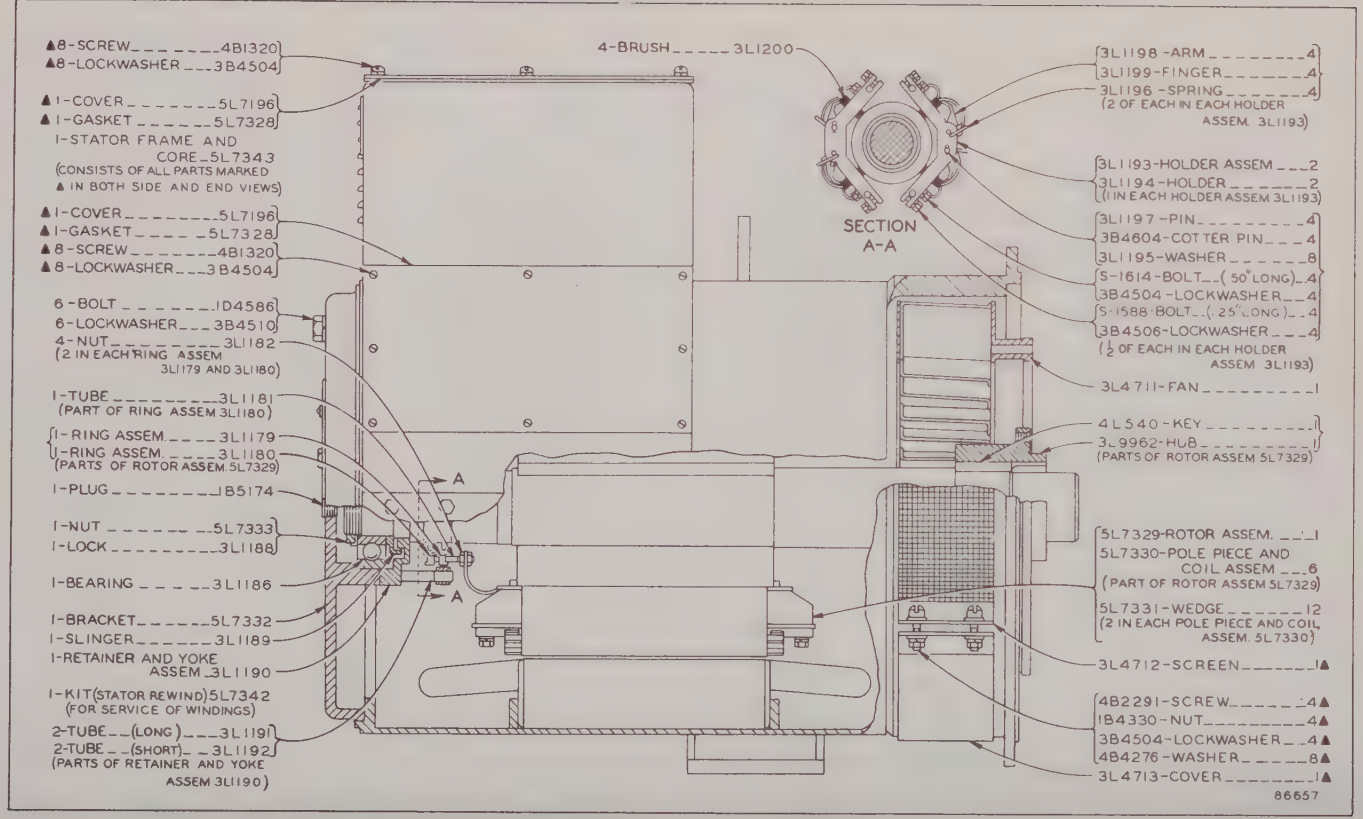
5L3902 GENERATOR—3 Phase—Side View

Effective with Generator Serial No. 250SH1. 240/480 Volt 60 Cycle at 1200 R.P.M. or 200/400 Volt 50 Cycle at 1000 R.P.M.

5L3902 GENERATOR—3 Phase—End View

Effective with Generator Serial No. 250SH1. 240/480 Volts, 60 Cycle at 1200 R.P.M. or 200/400 Volt, 50 Cycle at 1000 R.P.M.
5L6993 Static Exciter and Regulator Assembly parts are shown on Pages 170 and 171



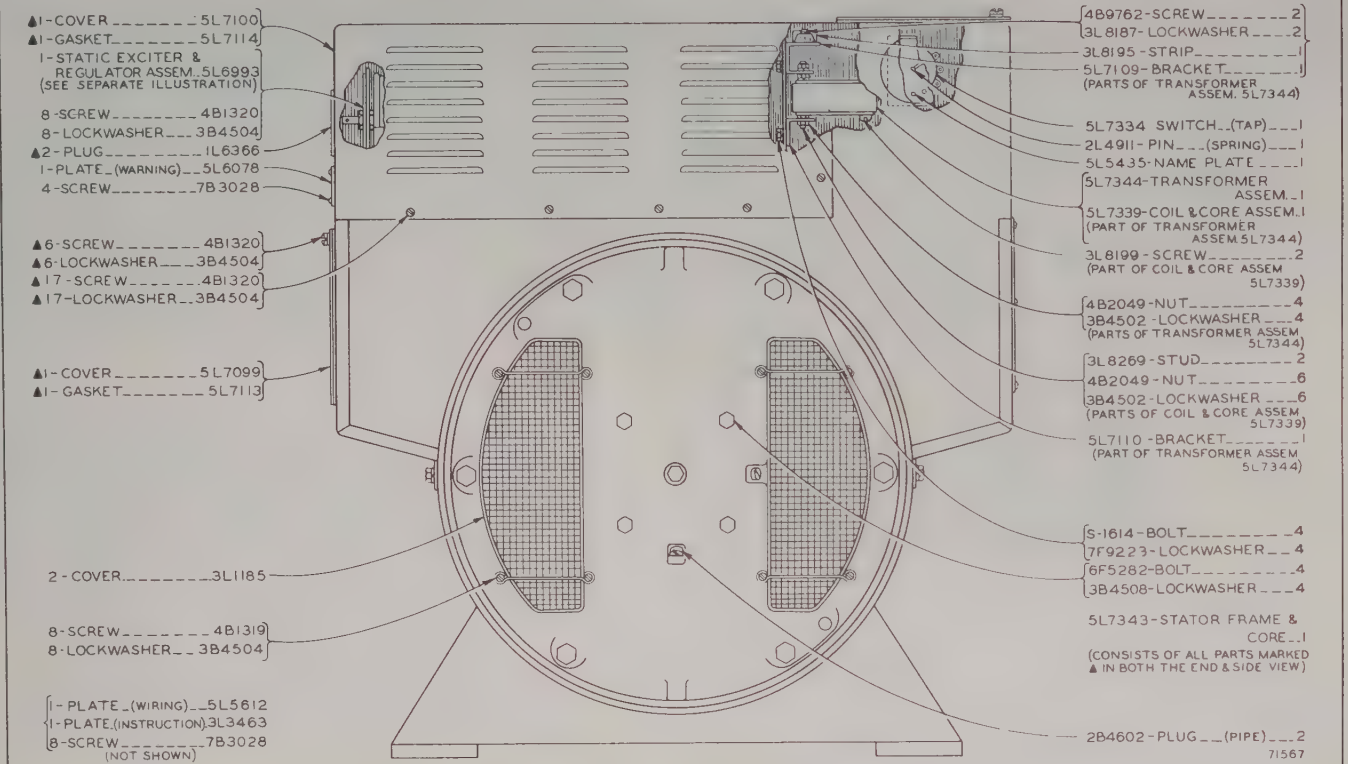


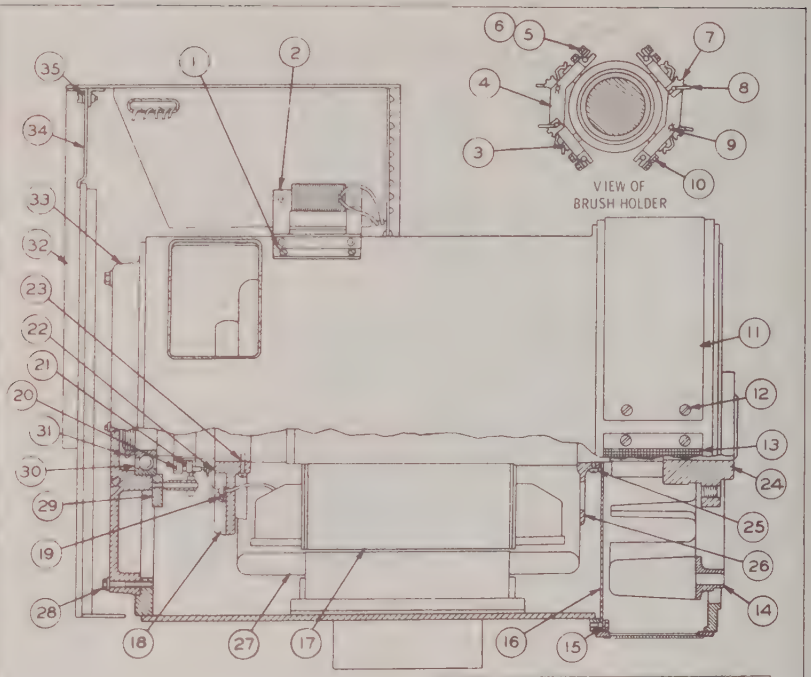
5L3903 GENERATOR—2400 Volt—60 Cycle, 3 Phase—Side View
Effective with Generator Serial No. 250SN1

5L3903 GENERATOR—2400 Volt—60 Cycle, 3 Phase—End View

Effective with Generator Serial No. 250SN1

5L6993 Static Exciter and Regulator Assembly parts are shown on Pages 170 and 171



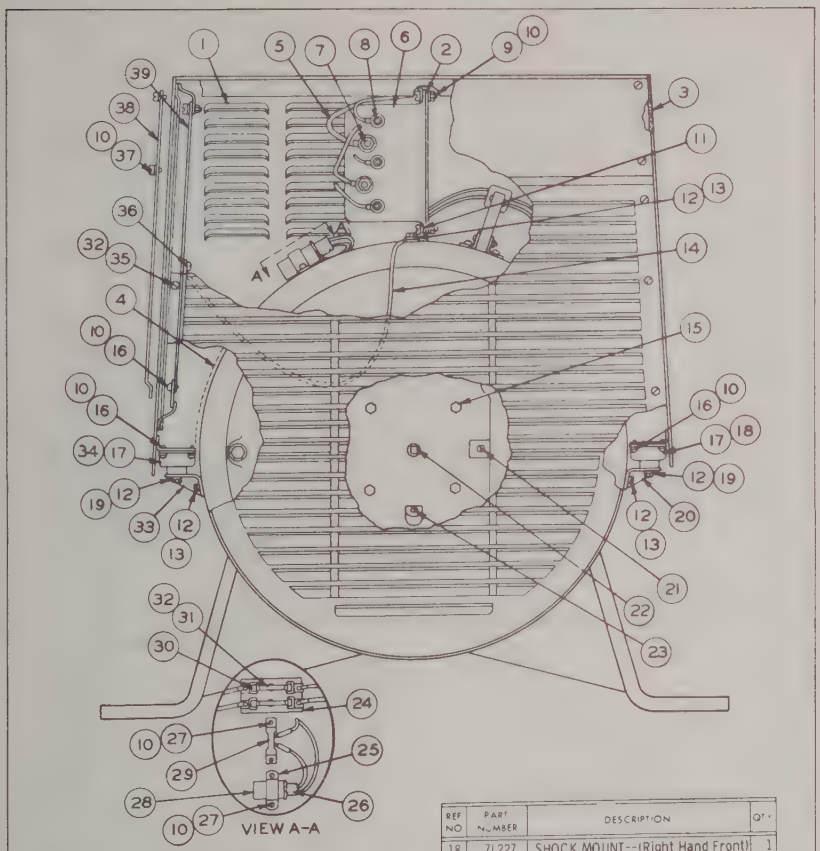


REF NO	PART NUMBER	DESCRIPTION	QTY
1	9F9327	SCREW	4
	9F8125	LOCKWASHER	4
2	7L7394	DROOP TRANSFORMER ASSEM.	1
3	5L7191	BRUSH	4
	5L7189	HOLDER ASSEM. -----(Brush)-----	2
		Each consisting of:	
4	5L7190	HOLDER	1
5	S-1614	BOLT	2
6	3B4504	LOCKWASHER	4
7	2L4853	ARM	2
8	2L2074	SPRING	2
	2L2076	PIN	2
9	3B4604	COTTER PIN	2
	2L2073	WASHER	4
10	S-1615	BOLT	2
11	7L7385	COVER	1
12	4B1238	SCREW	8
	7F9223	LOCKWASHER	8
13	7L7384	SCREEN	1
14	7L7386	FAN	1
15	S-1614	BOLT	8
	1H3244	LOCKWASHER	8
16	7L7403	DEFLECTOR	1

REF NO	PART NUMBER	DESCRIPTION	QTY
17	7L7449	ROTOR ASSEM.	1
18	7L7380	FAN	1
19	6L7006	CLAMP	2
	3H3627	SCREW	2
	9B7233	LOCKWASHER	2
20	2L2123	RING ASSEM. ------(Outer)-----	1
21	2L2122	RING ASSEM. ------(Inner)-----	1
22	2L4845	NUT	4
		(2 in each 2L2123 & 2L2122 Ring Assem.)	
23	4B1259	SCREW	2
24	7L7382	HUB	1
25	4B1258	SCREW	2
26	7L7381	DISC	1
		(Parts of 7L7449 Rotor Assem.)	
27	7L7448	STATOR ASSEM.	1
	7L7377	CHANNEL	1
		(Part of 7L7448 Stator Assem.)	
28	1B4367	BOLT	6
	3B4510	LOCKWASHER	6
	7L7454	RETAINER AND YOKE ASSEM.	1
29	2L4849	TUBE----------(Long)----------	2
	2L5592	TUBE----------(Short)----------	2
		(Parts of 7L7454 Retainer & Yoke Assem.)	
30	4L6677	BEARING	1
31	5F7404	NUT	1
	5F7403	LOCK	1
32	7L7391	COVER ASSEM.	1
33	7L7383	BRACKET	1
34	7L7393	PANEL	1
35	2D6249	SCREW	5
	1H3338	LOCKWASHER	5
		The following Repair Kits are available:	
	7L7450	KIT--------(Stator Rewind)--------	1
	7L7405	KIT-----(Rotor Balance Weight)----	1

98942

7L30 GENERATOR—3 Phase—Side View—Type 1
Effective with Serial No. 250TH1
230-460 Volt, 60 Cycle at 1200 R.P.M. or 200-400 Volt, 50 Cycle at 1000 R.P.M.

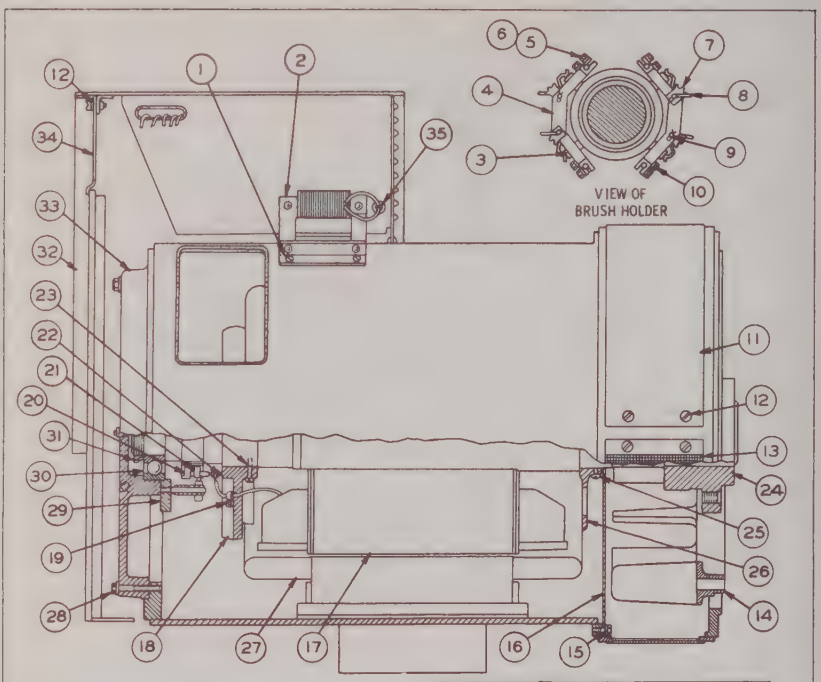


REF NO	PART NUMBER	DESCRIPTION	QTY
1	7L7387	BOX ASSEM.	1
2	7L7390	CHANNEL	1
3	7L7389	GASKET SET	1
4	7L7388	CHANNEL	1
		(Parts of 7L7387 Box Assem.)	
5	7L7399	WIRING HARNESS	1
6	7L6827	NOISE SUPPRESSION ASSEM.	1
7	1B4330	NUT	6
	3B4504	LOCKWASHER	6
8	1B2578	NUT	4
	3B4506	LOCKWASHER	4
		(Parts of 7L6827 Noise Suppression Assem.)	
9	6L7104	SCREW	8
10	9F8125	LOCKWASHER	35
11	7L4206	STRAP	1
12	2H3755	BOLT	11
13	7H3937	LOCKWASHER	7
14	7L7396	CABLE ASSEM.	1
15	S-1573	BOLT	4
	3B4508	LOCKWASHER	4
16	9F9327	SCREW	20
17	7L229	SHOCK MOUNT (Right Hand Rear-Left Hand Rear)	2

REF NO	PART NUMBER	DESCRIPTION	QTY
18	7L227	SHOCK MOUNT--(Right Hand Front)	1
19	1H7186	LOCKWASHER	4
20	6L9964	BRACKET ASSEM.	1
21	2B7408	PLUG	1
22	1B5174	PLUG	1
23	2B7409	PLUG	1
24	7L7398	BLOCK	1
25	7L7402	STRAP	1
26	7L7392	BOOT	1
27	2H8533	MACHINE SCREW	4
28	7L7400	CAPACITOR	1
29	7L7397	RESISTOR ASSEM.	1
30	7L6745	FUSE	2
31	4B1258	MACHINE SCREW	2
32	1H3338	LOCKWASHER	10
33	7L7378	BRACKET ASSEM.	1
34	7L228	SHOCK MOUNT--(Left Hand Front)	1
35	2D6249	SCREW	8
36	4B1220	SCREW	1
	9B7233	LOCKWASHER	1
37	3K8190	SCREW	8
38	6L8311	COVER	1
	6L6523	LABEL--------(Instruction)	1
	7L6738	WIRING DIAGRAM	1
39	7L7395	EXCITER AND REGULATOR ASSEM. (See Separate Illustration)	1
	6L6421	LABEL----------(Warning)	1

98941

7L30 GENERATOR—3 Phase—End View—Type 1
Effective with Generator Serial No. 250TH1
230-460 Volt, 60 Cycle at 1200 R.P.M. or 200-400 Volt, 50 Cycle at 1000 R.P.M.
7L7395 Exciter & Regulator Assembly parts are shown on Page 171B



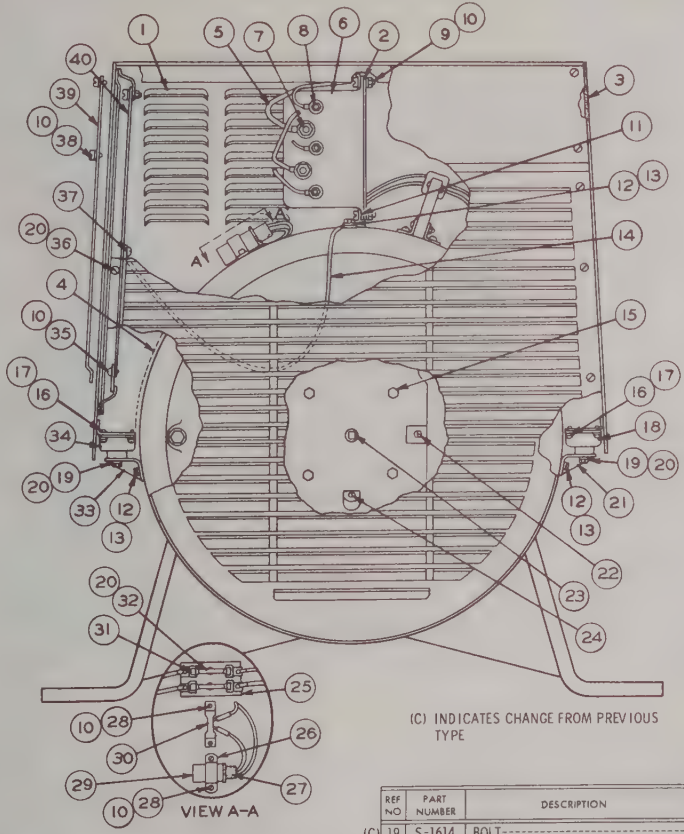
(C) INDICATES CHANGE FROM PREVIOUS TYPE

REF NO		PART NUMBER	DESCRIPTION	QTY
(C)	1	9F9327	SCREW	4
		9F5599	LOCKWASHER	4
	2	7L7394	DROOP TRANSFORMER ASSEM.	1
	3	5L7191	BRUSH	4
		5L7189	HOLDER ASSEM. -----(Brush)-----	2
			Each consisting of:	
	4	5L7190	HOLDER	1
	5	S-1614	BOLT	2
	6	3B4504	LOCKWASHER	4
	7	2L4853	ARM	2
	8	2L2074	SPRING	2
		2L2076	PIN	2
	9	3B4604	COTTER PIN	2
		2L2073	WASHER	4
	10	S-1615	BOLT	2
	11	7L7385	COVER	1
(C)	12	2D6249	SCREW	13
		7F9223	LOCKWASHER	21
	13	7L7384	SCREEN	1
	14	7L7386	FAN	1
	15	S-1614	BOLT	8
	16	7L7403	DEFLECTOR	1

REF NO	PART NUMBER	DESCRIPTION	QTY
17	7L7449	ROTOR ASSEM.	1
18	7L7380	FAN	1
	6L7008	CLAMP	2
19	3H3627	SCREW	2
	9B7233	LOCKWASHER	2
20	2L2123	RING ASSEM. ------(Outer)-----	1
21	2L2122	RING ASSEM. ------(Inner)-----	1
22	2L4845	NUT	4
		(2 in each 2L2123 & 2L2122 Ring Assem.)	
23	4B1259	SCREW	2
24	7L7382	HUB	1
25	4B1258	SCREW	2
26	7L7381	DISC	1
		(Parts of 7L7449 Rotor Assem.)	
27	7L7448	STATOR ASSEM.	1
	7L7377	CHANNEL	1
		(Part of 7L7448 Stator Assem.)	
28	1B4367	BOLT	6
	3B4510	LOCKWASHER	6
	7L7454	RETAINER AND YOKE ASSEM.	1
29	2L4849	TUBE----------(Long)----------	2
	2L5592	TUBE---------(Short)----------	2
		(Parts of 7L7454 Retainer & Yoke Assem.)	
30	4L6677	BEARING	1
31	5F7404	NUT	1
	5F7403	LOCK	1
32	7L7391	COVER ASSEM.	1
33	7L7383	BRACKET	1
34	7L7393	PANEL	1
(C) 35	8L3948	GROMMET	1
		The following Repair Kits are available:	
	7L7450	KIT--------(Stator Rewind)--------	1
	7L7405	KIT----(Rotor Balance Weight)-----	1

122320

7L30 GENERATOR—3 Phase—Side View—Type 2
Effective with Generator Serial No. 250TH1
230-460 Volt, 60 Cycle at 1200 R.P.M. or 200-400 Volt, 50 Cycle at 1000 R.P.M.



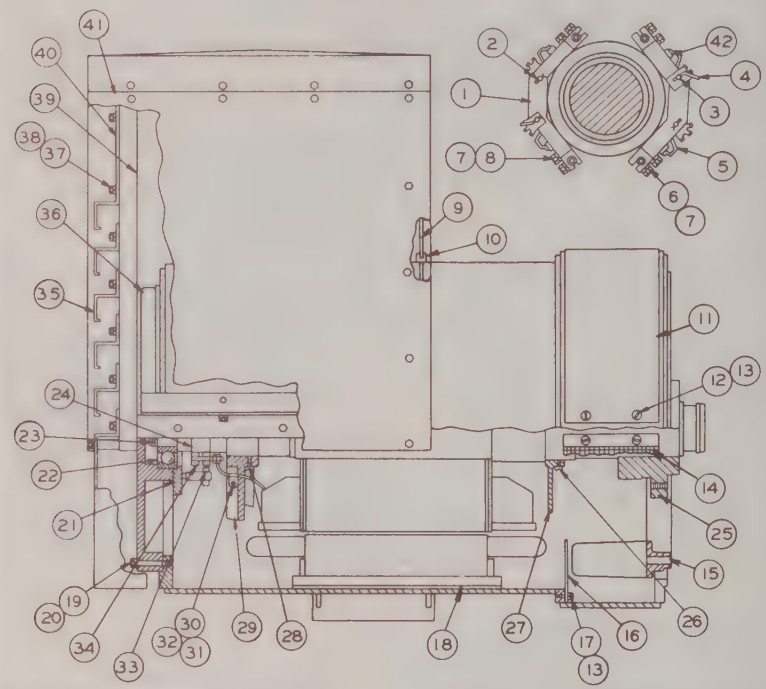
(C) INDICATES CHANGE FROM PREVIOUS TYPE

REF NO	PART NUMBER	DESCRIPTION	QTY
1	7L7387	BOX ASSEM.	1
2	7L7390	CHANNEL	1
3	7L7389	GASKET SET	1
4	7L7388	CHANNEL	1
		(Parts of 7L7387 Box Assem.)	
5	7L7399	WIRING HARNESS	1
6	7L6827	NOISE SUPPRESSION ASSEM.	1
7	1B4330	NUT	6
	3B4504	LOCKWASHER	6
8	1B2578	NUT	4
	3B4506	LOCKWASHER	4
		(Parts of 7L6827 Noise Suppression Assem.)	
9	6L7104	SCREW	8
(C) 10	9F5599	LOCKWASHER	24
11	7L4206	STRAP	1
(C) 12	2H3755	BOLT	7
(C) 13	1H7186	LOCKWASHER	7
14	7L7396	CABLE ASSEM.	1
15	S-1573	BOLT	4
	3B4508	LOCKWASHER	4
(C) 16	4B1237	SCREW	24
(C) 17	8F1434	LOCKWASHER	24
(C) 18	7L893	SHOCKMOUNT-----(Right Hand)	3

REF NO	PART NUMBER	DESCRIPTION	QTY
(C) 19	S-1614	BOLT	6
(C) 20	7F9223	LOCKWASHER	16
21	6L9964	BRACKET ASSEM.	1
22	2B7408	PLUG	1
23	1B5174	PLUG	1
24	2B7409	PLUG	1
25	7L7398	BLOCK	1
26	7L7402	STRAP	1
27	7L7392	BOOT	1
28	2H8533	SCREW	4
29	7L7400	CAPACITOR	1
30	7L7397	RESISTOR ASSEM.	1
31	7L6745	FUSE	2
32	4B1258	SCREW	2
33	7L7378	BRACKET ASSEM.	1
(C) 34	7L227	SHOCKMOUNT----(Left Hand)	3
35	9F9327	BOLT	4
36	2D6249	SCREW	8
37	4B1220	SCREW	1
	9B7233	LOCKWASHER	1
38	3K8190	SCREW	8
39	6L8311	COVER	1
	6L6523	LABEL--------(Instruction)	1
	7L6738	WIRING DIAGRAM	1
40	7L7395	EXCITER AND REGULATOR ASSEM. (See Separate Illustration)	1
	6L6421	LABEL---------(Warning)	1

122321

7L30 GENERATOR—3 Phase—End View—Type 2
Effective with Generator Serial No. 250TH1
230-460 Volt, 60 Cycle at 1200 R.P.M. or 200-400 Volt, 50 Cycle at 1000 R.P.M.
7L7395 Exciter and Regulator Assembly parts are shown on Page 171B

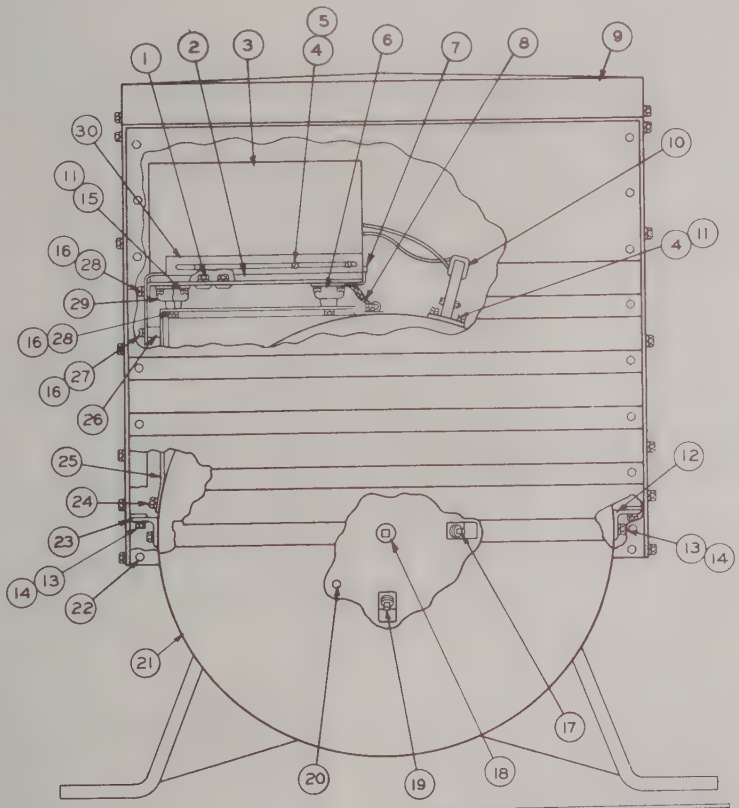


REF. NO.	PART NUMBER	DESCRIPTION	QTY
1	5L7189	HOLDER ASSEM.	1
		Each consisting of:	
	5L7190	HOLDER	1
2	3B4604	COTTER PIN	2
	2L2073	WASHER	4
3	2L2076	PIN	2
4	2L4853	ARM	2
5	2L2074	SPRING	2
6	S1614	BOLT	2
7	3B4504	LOCKWASHER	4
8	S1615	BOLT	2
9	1N9057	PANEL----(Front)	1
10	1N9053	CHANNEL	1
11	7L7385	COVER	1
12	2D6249	SCREW	8
13	7F9223	LOCKWASHER	24
14	7L7384	SCREEN	1
15	7L7386	FAN	1
16	7L7403	DEFLECTOR	1
17	S1614	BOLT	8
18	1N8617	STATOR ASSEM.	1
	7L7377	CHANNEL	1
		(Part of 1N8617 Stator Assem.)	
19	1B4367	BOLT	6
20	3B4510	LOCKWASHER	6
21	7L7454	RETAINER & YOKE ASSEM.	1
	2L4849	TUBE----(Long)	2
	2L5592	TUBE----(Short)	2
		(Parts of 7L7454 Retainer & Yoke Assem.)	

REF. NO.	PART NUMBER	DESCRIPTION	QTY
22	4L6677	BEARING	1
23	1N8620	RING	1
24	1N8618	ROTOR ASSEM.	1
25	7L7382	HUB	1
26	4B1258	SCREW	2
27	7L7381	DISC	1
28	4B1259	SCREW	2
29	7L7380	FAN	1
30	6L7008	CLAMP	2
31	3H3627	SCREW	2
32	9B7233	LOCKWASHER	2
33	2L2122	RING ASSEM.----(Inner)	1
	2L4845	NUT	2
		(Part of 2L2122 Ring Assem.)	
34	2L2123	RING ASSEM.----(Outer)	1
		(Parts of 1N8618 Rotor Assem.)	
	2L4844	TUBE	1
	2L4845	NUT	2
		(Parts of 2L2123 Ring Assem.)	
35	1N9060	LOUVER	4
36	7L7383	BRACKET	1
37	S509	BOLT	60
38	9F5644	LOCKWASHER	60
39	1N9055	FRAME ASSEM.----(Right Hand)	1
	1N9054	FRAME ASSEM.----(Left Hand)	1
40	1N9061	PANEL----(Meter)	1
41	1N9059	PANEL----(Side)	2
42	5L7191	BRUSH	4

124314

7L90 GENERATOR—3 Phase—Side View
Generator Serial No. 250TH1500 to 250TH1999 inclusive
230-460 Volt, 60 hertz at 1200 R.P.M. or 200-400 Volt, 50 hertz at 1000 R.P.M.

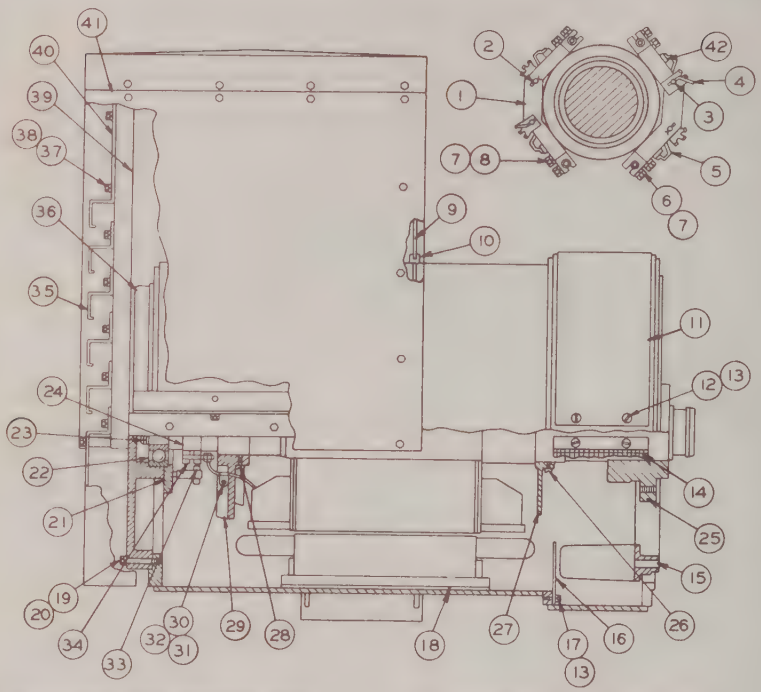


REF NO	PART NUMBER	DESCRIPTION	QTY
1	S1613	BOLT	4
	1H3244	LOCKWASHER	4
2	8L9821	SUPPORT ASSEM.	1
3	1N9062	EXCITER & REGULATOR ASSEM. (See Separate Illustration)	1
4	9F9327	SCREW	8
5	8F1434	LOCKWASHER	4
6	8L5477	SHOCKMOUNT	3
7	8L8602	CHANNEL	1
8	8L5476	STRAP	1
9	1N9056	COVER	1
10	7L7394	DROOP TRANSFORMER ASSEM.	1
11	9F5599	LOCKWASHER	20
12	1N5383	BRACKET	1
13	S509	BOLT	14
14	8F3590	LOCKWASHER	14
15	4B1237	SCREW	16
16	7F9223	LOCKWASHER	8
17	2B7408	PLUG	1

REF NO	PART NUMBER	DESCRIPTION	QTY
18	1B5174	PLUG	1
19	2B7409	PLUG	1
20	S1573	BOLT	4
	3B4508	LOCKWASHER	4
21	1N9058	COVER ASSEM.	1
22	L1143	BOLT	2
	9F5644	LOCKWASHER	2
23	1N5364	BRACKET	1
24	2H3755	BOLT	6
	1H7186	LOCKWASHER	6
25	1N9063	BRACKET	2
26	8L9826	SPACER	2
27	4B1258	SCREW	2
28	S1614	BOLT	4
29	7L893	SHOCKMOUNT	1
30	8L9823	GUIDE	2
	8L5656	WIRING DIAGRAM	1
	6L6523	LABEL--------(Instruction)--------	1
	7L7450	KIT--------(Stator Rewind)--------	1
	7L7405	KIT-----(Rotor Balance Weight)----	1

124315

7L90 GENERATOR—3 Phase—End View
Generator Serial No. 250TH1500 to 250TH1999 inclusive. 230-460 Volt, 60 hertz at 1200 R.P.M. or 200-400 Volt, 50 hertz at 1000 R.P.M. 1N9062 Exciter and Regulator parts are shown on Pages 171E and 171F

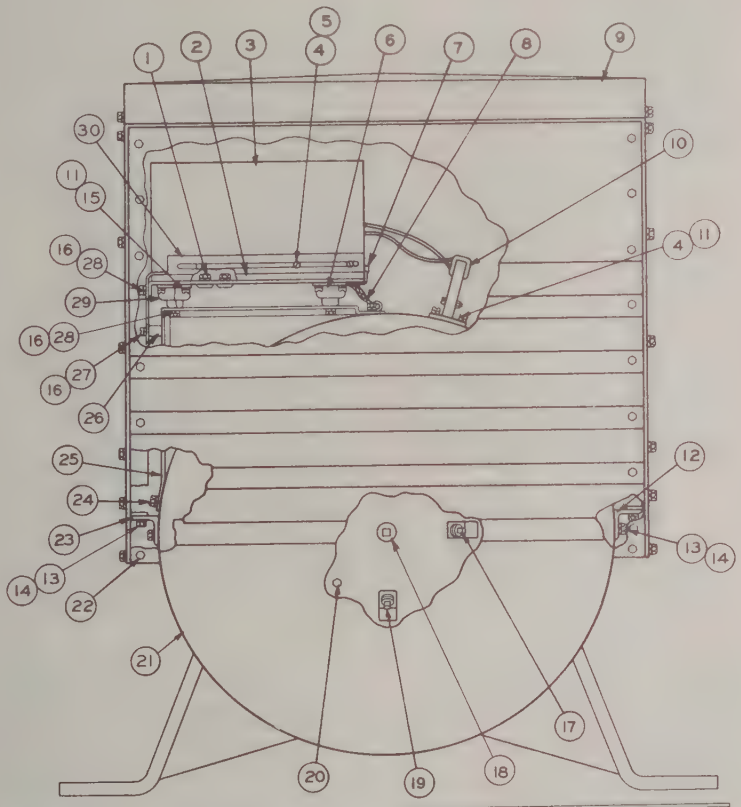


REF. NO.	PART NUMBER	DESCRIPTION	QTY
1	5L7189	HOLDER ASSEM.	2
		Each consisting of:	
	5L7190	HOLDER	1
2	3B4604	COTTER PIN	2
	2L2073	WASHER	4
3	2L2076	PIN	2
4	2L4853	ARM	2
5	2L2074	SPRING	2
6	S1614	BOLT	2
7	3B4504	LOCKWASHER	4
8	S1615	BOLT	2
9	1N9057	PANEL----------(Front)----------	1
10	1N9053	CHANNEL	1
11	7L7385	COVER	1
12	2D6249	SCREW	8
13	7F9223	LOCKWASHER	16
14	7L7384	SCREEN	1
15	7L7386	FAN	1
16	7L7403	DEFLECTOR	1
17	S1614	BOLT	8
18	2N5650	STATOR ASSEM.	1
	7L7377	CHANNEL	1
		(Part of 2N5650 Stator Assem.)	
19	1B4367	BOLT	6
20	3B4510	LOCKWASHER	6
21	7L7454	RETAINER & YOKE ASSEM	1
	2L4849	TUBE----------(Long)----------	2
	2L5592	TUBE---------(Short)----------	2
		(Parts of 7L7454 Retainer & Yoke Assem.)	

REF. NO.	PART NUMBER	DESCRIPTION	QTY
22	4L6677	BEARING	1
23	1N8620	RING	1
24	1N8618	ROTOR ASSEM.	1
25	7L7382	HUB	1
26	4B1258	SCREW	2
27	7L7381	DISC	1
28	4B1259	SCREW	2
29	7L7380	FAN	1
30	6L7008	CLAMP	2
31	3H3627	SCREW	2
32	9B7233	LOCKWASHER	2
33	2L2122	RING ASSEM.-----(Inner)------	1
	2L4845	NUT	2
		(Part of 2L2122 Ring Assem.)	
34	2L2123	RING ASSEM.-----(Outer)------	1
		(Parts of 1N8618 Rotor Assem.)	
	2L4844	TUBE	1
	2L4845	NUT	2
		(Parts of 2L2123 Ring Assem.)	
35	1N9060	LOUVER	4
36	7L7383	BRACKET	1
37	S509	BOLT	60
38	9F5644	LOCKWASHER	60
39	1N9055	FRAME ASSEM.----(Right Hand)---	1
	1N9054	FRAME ASSEM.----(Left Hand)-----	1
40	1N9061	PANEL----------(Meter)----------	1
41	1N9059	PANEL----------(Side)----------	2
42	5L7191	BRUSH	4

127903

8L32 GENERATOR—3 Phase—Side View—Type 1—Replaces 7L90
Generator Serial No. 250TH2000 to 250TH2999 inclusive. 200-400 Volt, 50 hertz at 1000 R.P.M. or 230-460 Volt, 60 hertz at 1200 R.P.M.

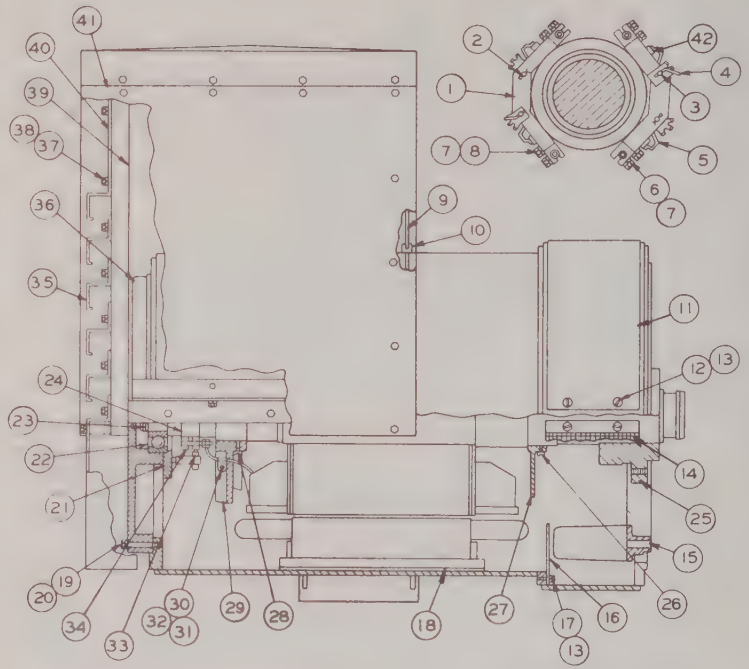


REF NO.	PART NUMBER	DESCRIPTION	QTY
1	S1613	BOLT	4
	1H3244	LOCKWASHER	4
2	8L9821	SUPPORT ASSEM.	1
3	1N8507	EXCITER & REGULATOR ASSEM. (See Separate Illustration)	1
4	9F9327	SCREW	8
5	8F1434	LOCKWASHER	4
6	8L5477	SHOCKMOUNT	3
7	8L8602	CHANNEL	1
8	8L5476	STRAP	1
9	1N9056	COVER	1
10	7L7394	DROOP TRANSFORMER ASSEM.	1
11	9F5599	LOCKWASHER	20
12	1N5383	BRACKET	1
13	S509	BOLT	14
14	8F3590	LOCKWASHER	14
15	4B1237	SCREW	16
16	7F9223	LOCKWASHER	8
17	2B7408	PLUG	1

REF NO.	PART NUMBER	DESCRIPTION	QTY
18	1B5174	PLUG	1
19	2B7409	PLUG	1
20	S1573	BOLT	4
	3B4508	LOCKWASHER	4
21	1N9058	COVER ASSEM.	1
22	L1143	BOLT	2
	9F5644	LOCKWASHER	2
23	1N5364	BRACKET	1
24	2H3755	BOLT	6
	1H7186	LOCKWASHER	6
25	1N9063	BRACKET	2
26	8L9826	SPACER	2
27	4B1258	SCREW	2
28	S1614	BOLT	6
29	7L893	SHOCKMOUNT	1
30	8L9823	GUIDE	2
	2N3601	WIRING DIAGRAM	1
	6L6523	LABEL-(Instruction)	1
	2N5651	KIT-(Stator Rewind)	1
	7L7405	KIT-(Rotor Balance Weight)	1

127904

8L32 GENERATOR—3 Phase—End View—Type 1—Replaces 7L90 Generator Serial No. 250TH2000 to 250TH2999 inclusive. 200-400 Volt, 50 hertz at 1000 R.P.M. or 230-460 Volt, 60 hertz at 1200 R.P.M. 1N8507 Exciter and Regulator parts are shown on Pages 171F-1 and 171F-2

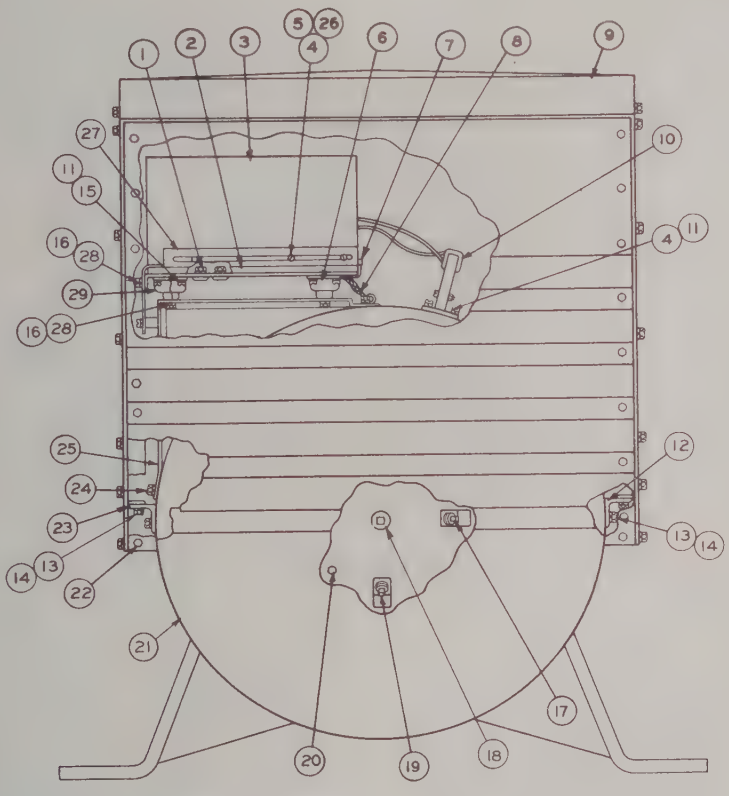


REF NO.	PART NUMBER	DESCRIPTION	QTY
	5L7189	HOLDER ASSEM.	2
1		Each consisting of:	
	5L7190	HOLDER	1
2	3B4604	COTTER PIN	2
	2L2073	WASHER	4
3	2L2076	PIN	2
4	2L4853	ARM	2
5	2L2074	SPRING	2
6	S1614	BOLT	2
7	3B4504	LOCKWASHER	4
8	S1615	BOLT	2
9	1N9057	PANEL-----(Front)-----	1
10	1N9053	CHANNEL	1
11	7L7385	COVER	1
12	2D6249	SCREW	8
13	7F9223	LOCKWASHER	16
14	7L7384	SCREEN	1
15	7L7386	FAN	1
16	7L7403	DEFLECTOR	1
17	2A762	BOLT	8
18	2N5650	STATOR ASSEM.	1
	7L7377	CHANNEL	1
		(Part of 2N5650 Stator Assem.)	
19	1B4367	BOLT	6
20	3B4510	LOCKWASHER	6
	7L7454	RETAINER & YOKE ASSEM.	1
21	2L4849	TUBE-----(Long)-----	2
	2L5592	TUBE-----(Short)-----	2
		(Parts of 7L7454 Retainer & Yoke Assem.)	

REF NO.	PART NUMBER	DESCRIPTION	QTY
22	4L6677	BEARING	1
23	1N8620	RING	1
24	1N8618	ROTOR ASSEM.	1
25	7L7382	HUB	1
26	4B1258	SCREW	2
27	7L7381	DISC	1
28	4B1259	SCREW	2
29	7L7380	FAN	1
30	6L7008	CLAMP	2
31	3H3627	SCREW	2
32	9B7233	LOCKWASHER	2
33	2L2122	RING ASSEM. -----(Inner)----	1
	2L4845	NUT	2
		(Part of 2L2122 Ring Assem.)	
34	2L2123	RING ASSEM. -----(Outer)-----	1
		(Parts of 1N8618 Rotor Assem.)	
	2L4844	TUBE	1
	2L4845	NUT	2
		(Parts of 2L2123 Ring Assem.)	
35	1N9060	LOUVER	4
36	7L7383	BRACKET	1
37	S509	BOLT	60
38	9F5644	LOCKWASHER	60
39	1N9055	FRAME ASSEM. ----(Right Hand)---	1
	1N9054	FRAME ASSEM. ----(Left Hand)----	1
40	1N9061	PANEL-----(Meter)-----	1
41	1N9059	PANEL-----(Side)-----	2
42	5L7191	BRUSH	4

135847

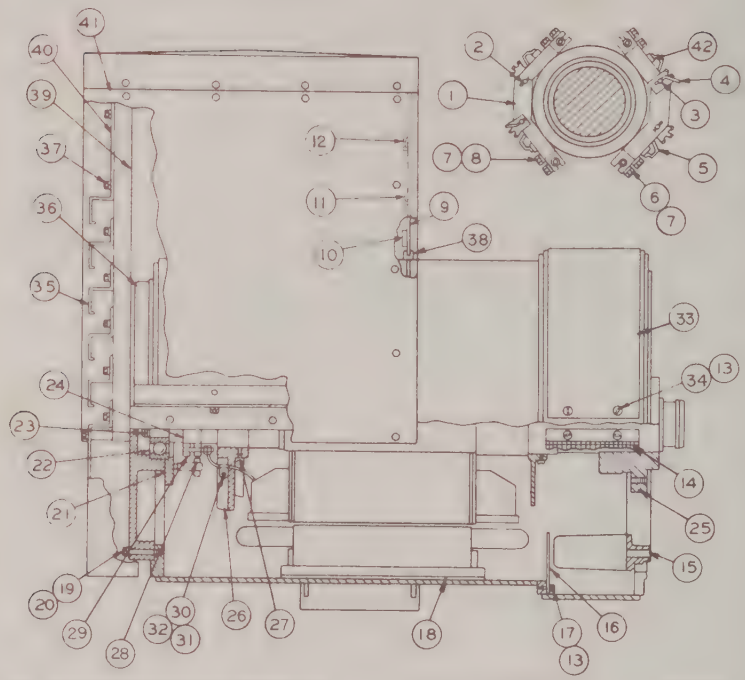
8L32 GENERATOR—3 Phase—Side View—Type 2
Generator Serial No. 250TH2000 to 250TH2999 inclusive
200-400 Volt, 50 hertz at 1000 R.P.M. or 230-460 Volt, 60 hertz at 1200 R.P.M.



REF NO.	PART NUMBER	DESCRIPTION	QTY
1	8F5758	SCREW	4
	1H3244	LOCKWASHER	4
2	8L9821	SUPPORT ASSEM.	1
3	1N8507	EXCITER & REGULATOR ASSEM. (See Separate Illustration)	1
4	9F9327	SCREW	8
5	8F1434	LOCKWASHER	4
6	8L5477	SHOCKMOUNT	3
7	8L8602	CHANNEL	1
8	8L5476	STRAP	1
9	1N9056	COVER	1
10	7L7394	DROOP TRANSFORMER ASSEM.	1
11	9F5599	LOCKWASHER	20
12	1N5383	BRACKET	1
13	S509	BOLT	14
14	8F3590	LOCKWASHER	14
15	7S4346	SCREW	16
16	7F9223	LOCKWASHER	6
17	2B7408	PLUG	1
18	1B5174	PLUG	1
19	2B7409	PLUG	1
20	S1573	BOLT	4
	3B4508	LOCKWASHER	4
21	1N9058	COVER ASSEM.	1
22	L1143	BOLT	2
	9F5644	LOCKWASHER	2
23	1N5364	BRACKET	1
24	S1617	BOLT	6
	1H7186	LOCKWASHER	6
25	1N9063	BRACKET	2
26	4B4274	WASHER	4
27	8L9823	GUIDE	2
28	S1614	BOLT	6
29	7L893	SHOCKMOUNT	1
	2N3601	WIRING DIAGRAM	1
	6L6523	LABEL-(Instruction)	1
	2N5651	KIT-(Stator Rewind)	1
	7L7405	KIT-(Rotor Balance Weight)	1

135848

8L32 GENERATOR—3 Phase—End View—Type 2
Generator Serial No. 250TH2000 to 250TH2999 inclusive
200-400 Volt, 50 hertz at 1200 R.P.M. 1N8507 Exciter and Regulator
parts are shown on Pages 171F-1 & 171F-2

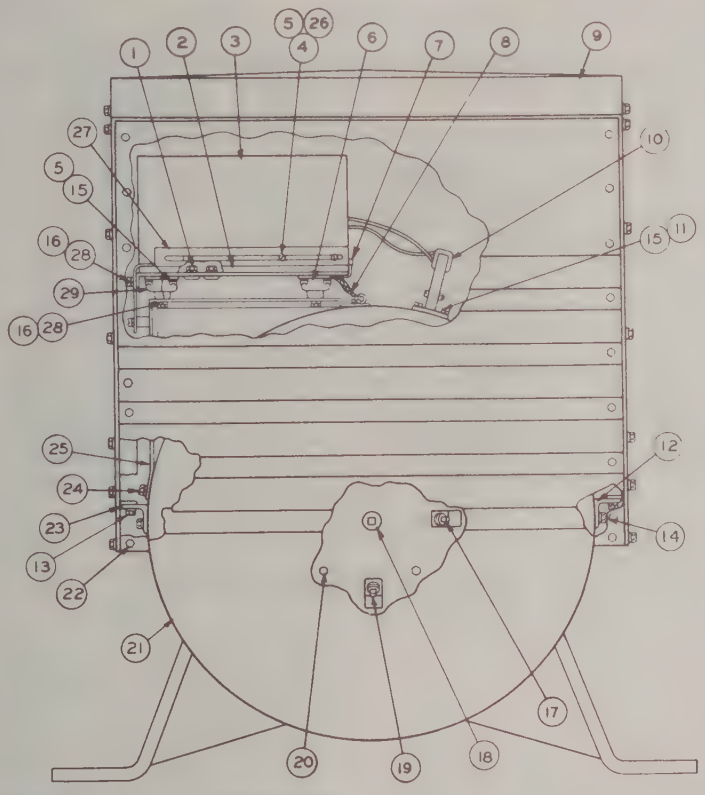


REF NO	PART NUMBER	DESCRIPTION	QTY
1	5L7189	HOLDER ASSEM. (Each Includes)	2
	5L7190	HOLDER	1
2	3B4604	COTTER PIN	2
	2L2073	WASHER	4
3	2L2076	PIN	2
4	2L4853	ARM	2
5	2L2074	SPRING	2
6	S1614	BOLT	2
7	3B4504	LOCKWASHER	4
8	S1615	BOLT	2
C 9	5N3166	PANEL ASSEM. ----(front) (Includes)	1
10	4F8711	PLUG	1
11	5N3174	PLUG	6
12	5N3175	PLUG	1
13	7F9223	LOCKWASHER	16
14	7L7384	SCREEN	1
15	7L7386	FAN	1
16	7L7403	DEFLECTOR	1
17	2A762	BOLT	8
C 18	3N6292	STATOR ASSEM. (Includes)	1
	7L7377	CHANNEL	1
19	1B4367	BOLT	6
20	3B4510	LOCKWASHER	6
21	7L7454	RETAINER & YOKE ASSEM. (Includes)	1
	2L4849	TUBE-----(long)	2
	2L5592	TUBE-----(short)	2
22	4L6677	BEARING	1
23	1N8620	RING	1
C 24	3N6291	ROTOR ASSEM. (Includes)	1
25	7L7382	HUB	1
C 26	2N7751	FAN ASSEM. (Includes)	1
27	2N7736	SCREW	1
	FM055243	FORM- (Instructions for Installing Fan Assem. & Disc.)	1
28	2L2122	RING ASSEM. ---(inner) (Includes)	1
	2L4845	NUT	2
29	2L2123	RING ASSEM. ----(outer) (Includes)	1
	2L4844	TUBE	1
	2L4845	NUT	2
30	6L7008	CLAMP	2
31	3H3627	SCREW	2
32	9B7233	LOCKWASHER	2
33	7L7385	COVER	1
C 34	310243	SCREW	8
35	1N9060	LOUVER	4
36	7L7383	BRACKET	1
C 37	313414	SCREW	60
38	1N9053	CHANNEL	1
39	1N9055	FRAME ASSEM. --- (R. H.)	1
	1N9054	FRAME ASSEM. ----(L. H.)	1
40	1N9061	PANEL----------(meter)	1
41	1N9059	PANEL----------(side)	2
42	5L7191	BRUSH	4

175821

C INDICATES CHANGE

8L32 GENERATOR—3 Phase—Side View
Generator Serial No. 250TH3000—Up
200-400 Volt, 50 hertz at 1000 R.P.M. or 230-460 Volt, 60 hertz at 1200 R.P.M.



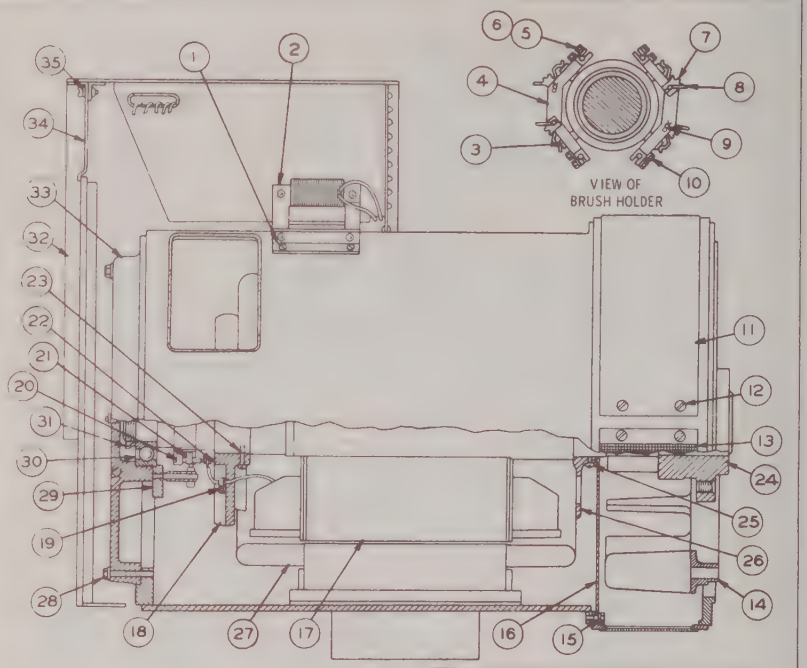
REF NO	PART NUMBER	DESCRIPTION	QTY.
1	8F5758	SCREW	4
	1H3244	LOCKWASHER	4
2	8L9821	SUPPORT ASSEM.	1
C 3	3N4692	EXCITER & REGULATOR ASSEM. (Separate Illustration)	1
C 4	9F9327	SCREW	4
C 5	8F1434	LOCKWASHER	20
6	8L5477	SHOCKMOUNT	3
7	8L8602	CHANNEL	1
8	8L5476	STRAP	1
9	1N9056	COVER	1
10	7L7394	DROOP TRANSFORMER ASSEM.	1
C 11	9F5599	LOCKWASHER	4
12	1N5383	BRACKET	1
C 13	313414	SCREW	8
C 14	319831	SCREW	6
C 15	7S4346	SCREW	20
16	7F9223	LOCKWASHER	6
17	2B7408	PLUG	1

18	1B5174	PLUG	1
19	2B7409	PLUG	1
20	S1573	BOLT	4
	3B4508	LOCKWASHER	4
21	1N9058	COVER ASSEM.	1
22	L1143	BOLT	2
	9F5644	LOCKWASHER	2
23	1N5364	BRACKET	1
24	S1617	BOLT	6
	1H7186	LOCKWASHER	6
25	1N9063	BRACKET	2
26	4B4274	WASHER	4
27	8L9823	GUIDE	2
28	S1614	BOLT	6
29	7L893	SHOCKMOUNT	1
C	3N4694	WIRING DIAGRAM	1
C ▲	6L6523	FILM—(instruction)	1
	2N5651	KIT—(stator rewind)	1
	7L7405	KIT—(rotor balance weight)	1

▲ NOT SHOWN C INDICATES CHANGE 175822

8L32 GENERATOR—3 Phase—End View

Generator Serial No. 250TH3000—Up. 200-400 Volt, 50 hertz at 1200 R.P.M. or 230-460 Volt, 60 hertz at 1200 R.P.M. 3N4692 Exciter & Regulator parts are shown on Pages 171F-5 & 171F-6

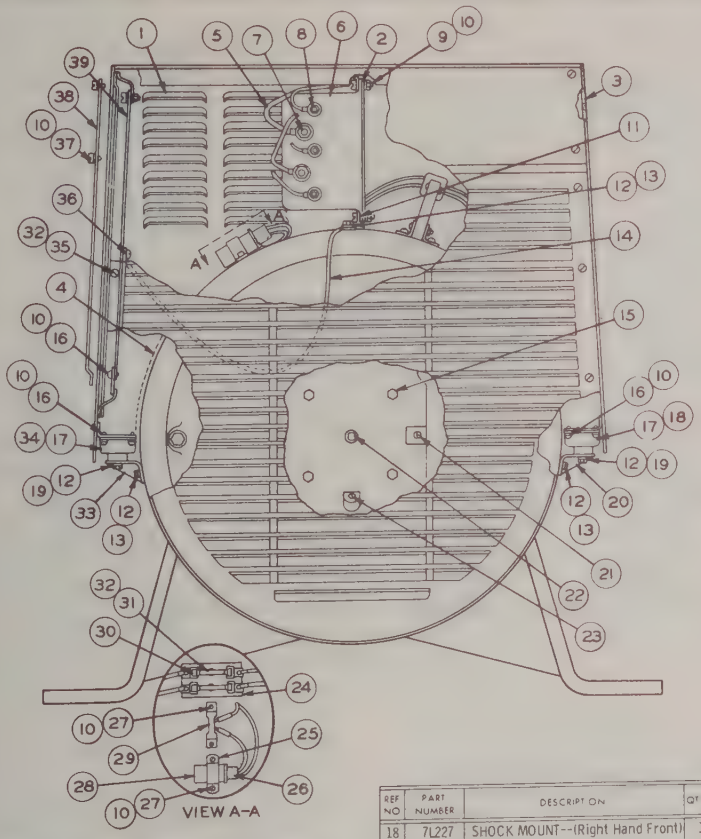


REF NO	PART NUMBER	DESCRIPTION	QTY
1	9F9327	SCREW	4
	9F8125	LOCKWASHER	4
2	7L7394	DROOP TRANSFORMER ASSEM.	1
3	5L7191	BRUSH	4
	5L7189	HOLDER ASSEM. -----(Brush)-----	2
		Each consisting of:	
4	5L7190	HOLDER	1
5	S-1614	BOLT	2
6	3B4504	LOCKWASHER	4
7	2L4853	ARM	2
8	2L2074	SPRING	2
9	2L2076	PIN	2
	3B4604	COTTER PIN	2
	2L2073	WASHER	4
10	S-1615	BOLT	2
11	7L7385	COVER	1
12	4B1238	SCREW	8
	7F9223	LOCKWASHER	8
13	7L7384	SCREEN	1
14	7L7386	FAN	1
15	S-1614	BOLT	8
	1H3244	LOCKWASHER	8
16	7L7403	DEFLECTOR	1

REF NO	PART NUMBER	DESCRIPTION	QTY
17	7L7379	ROTOR ASSEM.	1
18	7L7380	FAN	1
19	6L7008	CLAMP	2
	3H3627	SCREW	2
	9B7233	LOCKWASHER	2
20	2L2123	RING ASSEM. -----(Outer)-----	1
21	2L2122	RING ASSEM. -----(Inner)-----	1
22	2L4845	NUT	4
		(2 in each 2L2123 & 2L2122 Ring Assem.)	
23	4B1259	SCREW	2
24	7L7382	HUB	1
25	4B1258	SCREW	2
26	7L7381	DISC	1
		(Parts of 7L7379 Rotor Assem.)	
27	7L861	STATOR ASSEM.	1
	7L7377	CHANNEL	1
		(Part of 7L861 Stator Assem.)	
28	1B4367	BOLT	6
	3B4510	LOCKWASHER	6
29	7L7454	RETAINER AND YOKE ASSEM.	1
	2L4849	TUBE----------(Long)----------	2
	2L5592	TUBE---------(Short)----------	2
		(Parts of 7L7454 Retainer & Yoke Assem.)	
30	4L6677	BEARING	1
31	5F7404	NUT	1
	5F7403	LOCK	1
32	7L7391	COVER ASSEM.	1
33	7L7383	BRACKET	1
34	7L7393	PANEL	1
35	2D6249	SCREW	5
	1H3338	LOCKWASHER	5
		The following Repair Kits are available:	
	7L860	KIT---------(Stator Rewind)---------	1
	7L7405	KIT-----(Rotor Balance Weight)----	1

122079

7L31 GENERATOR—287-575 Volt—60 Cycle, 3 Phase—Side View—Type 1
Effective with Generator Serial No. 250TG1

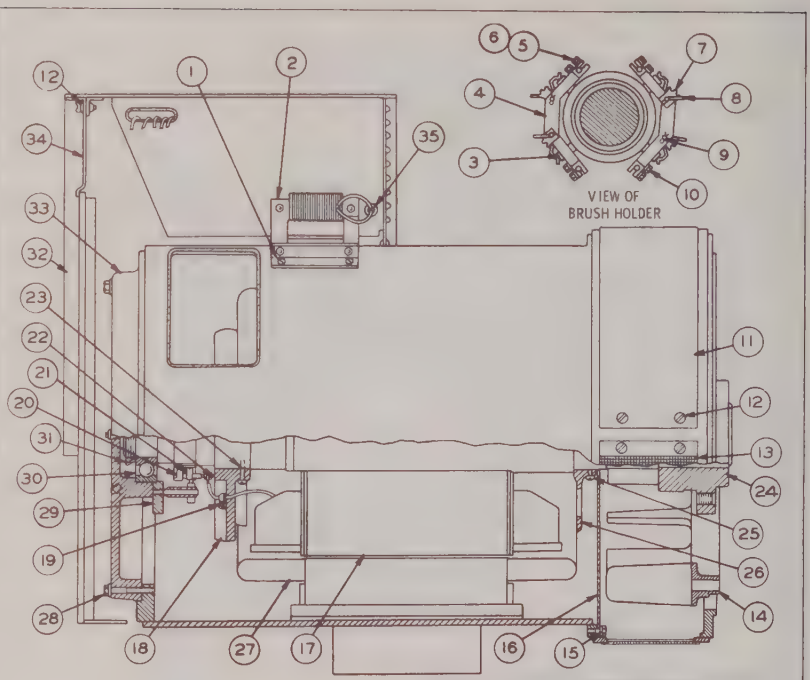


REF NO	PART NUMBER	DESCRIPTION	QTY
1	7L7387	BOX ASSEM.	1
2	7L7390	CHANNEL	1
3	7L7389	GASKET SET	1
4	7L7388	CHANNEL	1
		(Parts of 7L7387 Box Assem.)	
5	7L7399	WIRING HARNESS	1
6	7L6827	NOISE SUPPRESSION ASSEM.	1
7	1B4330	NUT	6
	3B4504	LOCKWASHER	6
8	1B2578	NUT	4
	3B4506	LOCKWASHER	4
		(Parts of 7L6827 Noise Suppression Assem.)	
9	6L7104	SCREW	8
10	9F8125	LOCKWASHER	35
11	7L4206	STRAP	1
12	2H3755	BOLT	11
13	7H3937	LOCKWASHER	7
14	7L7396	CABLE ASSEM.	1
15	S-1573	BOLT	4
	3B4508	LOCKWASHER	4
16	9F9327	SCREW	20
17	7L229	SHOCK MOUNT (Right Hand Rear-Left Hand Rear)	2

REF NO	PART NUMBER	DESCRIPTION	QTY
18	7L227	SHOCK MOUNT--(Right Hand Front)	1
19	1H7186	LOCKWASHER	4
20	6L9964	BRACKET ASSEM.	1
21	2B7408	PLUG	1
22	1B5174	PLUG	1
23	2B7409	PLUG	1
24	7L7398	BLOCK	1
25	7L7402	STRAP	1
26	7L7392	BOOT	1
27	2H8533	MACHINE SCREW	4
28	7L7400	CAPACITOR	1
29	7L7397	RESISTOR ASSEM.	1
30	7L6745	FUSE	2
31	4B1258	MACHINE SCREW	2
32	1H3338	LOCKWASHER	10
33	7L7378	BRACKET ASSEM.	1
34	7L228	SHOCK MOUNT--(Left Hand Front)	1
35	2D6249	SCREW	8
36	4B1220	SCREW	1
	9B7233	LOCKWASHER	1
37	3K8190	SCREW	8
38	6L8311	COVER	1
	6L6523	LABEL--------(Instruction)-------	1
	7L6738	WIRING DIAGRAM	1
39	7L7395	EXCITER AND REGULATOR ASSEM. (See Separate Illustration)	1
	6L6421	LABEL----------(Warning)--------	1

120778

7L31 GENERATOR—287-575 Volt—60 Cycle, 3 Phase—End View—Type 1
Effective with Generator Serial No. 250TG1
7L7395 Exciter & Regulator Assembly parts are shown on Page 171B



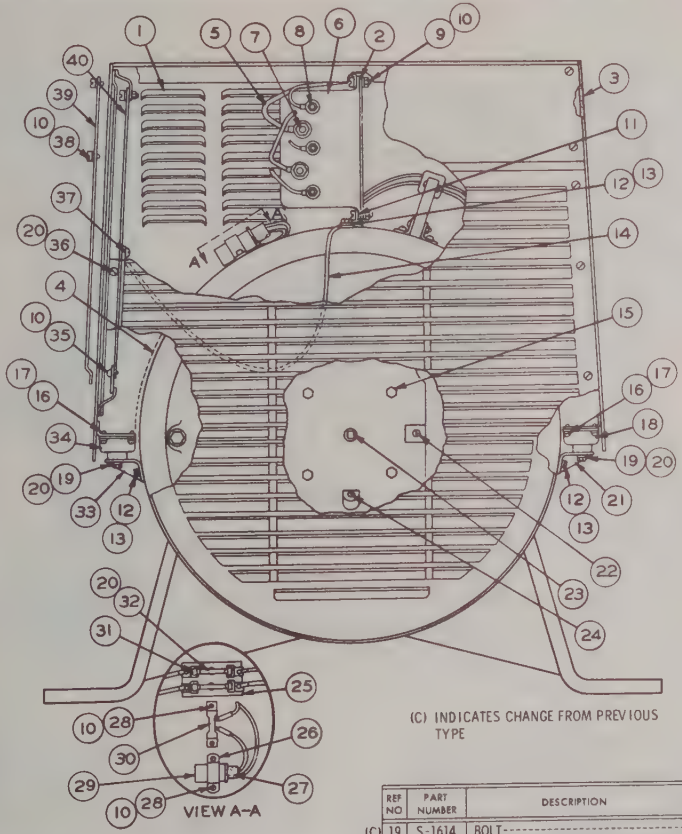
(C) INDICATES CHANGE FROM PREVIOUS TYPE

REF NO.	PART NUMBER	DESCRIPTION	QTY
(C) 1	9F9327	SCREW	4
	9F5599	LOCKWASHER	4
2	7L7394	DROOP TRANSFORMER ASSEM.	1
3	5L7191	BRUSH	4
	5L7189	HOLDER ASSEM. (Brush)	2
		Each consisting of:	
4	5L7190	HOLDER	1
5	S-1614	BOLT	2
6	3B4504	LOCKWASHER	4
7	2L4853	ARM	2
8	2L2074	SPRING	2
	2L2076	PIN	2
9	3B4604	COTTER PIN	2
	2L2073	WASHER	4
10	S-1615	BOLT	2
11	7L7385	COVER	1
(C) 12	2D6249	SCREW	13
	7F9223	LOCKWASHER	21
13	7L7384	SCREEN	1
14	7L7386	FAN	1
15	S-1614	BOLT	8
16	7L7403	DEFLECTOR	1

REF NO	PART NUMBER	DESCRIPTION	QTY
17	7L7379	ROTOR ASSEM.	1
18	7L7380	FAN	1
	6L7008	CLAMP	2
19	3H3627	SCREW	2
	9B7233	LOCKWASHER	2
20	2L2123	RING ASSEM. (Outer)	1
21	2L2122	RING ASSEM. (Inner)	1
22	2L4845	NUT	4
		(2 in each 2L2123 & 2L2122 Ring Assem.)	
23	4B1259	SCREW	2
24	7L7382	HUB	1
25	4B1258	SCREW	2
26	7L7381	DISC	1
		(Parts of 7L7379 Rotor Assem.)	
27	7L861	STATOR ASSEM.	1
	7L7377	CHANNEL	1
		(Part of 7L861 Stator Assem.)	
28	1B4367	BOLT	6
	3B4510	LOCKWASHER	6
	7L7454	RETAINER AND YOKE ASSEM.	1
29	2L4849	TUBE (Long)	2
	2L5592	TUBE (Short)	2
		(Parts of 7L7454 Retainer & Yoke Assem.)	
30	4L6677	BEARING	1
31	5F7404	NUT	1
	5F7403	LOCK	1
32	7L7391	COVER ASSEM.	1
33	7L7383	BRACKET	1
34	7L7393	PANEL	1
(C) 35	8L3948	GROMMET	1
		The following Repair Kits are available:	
	7L860	KIT (Stator Rewind)	1
	7L7405	KIT (Rotor Balance Weight)	1

122322

7L31 GENERATOR—287-575 Volt—60 Cycle, 3 Phase—Side View—Type 2
Effective with Generator Serial No. 250TG1

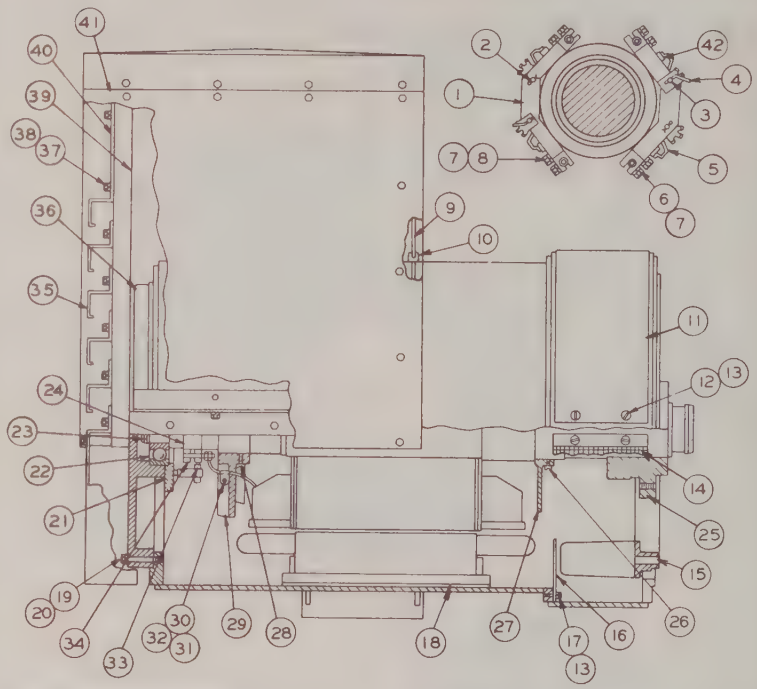


REF NO	PART NUMBER	DESCRIPTION	QTY
1	7L7387	BOX ASSEM.	1
2	7L7390	CHANNEL	1
3	7L7389	GASKET SET	1
4	7L7388	CHANNEL	1
		(Parts of 7L7387 Box Assem.)	
5	7L7399	WIRING HARNESS	1
6	7L6827	NOISE SUPPRESSION ASSEM.	1
7	1B4330	NUT	6
	3B4504	LOCKWASHER	6
8	1B2578	NUT	4
	3B4506	LOCKWASHER	4
		(Parts of 7L6827 Noise Suppression Assem.)	
9	6L7104	SCREW	8
(C) 10	9F5599	LOCKWASHER	16
11	7L4206	STRAP	1
(C) 12	2H3755	BOLT	7
(C) 13	1H7186	LOCKWASHER	7
14	7L7396	CABLE ASSEM.	1
15	S-1573	BOLT	4
	3B4508	LOCKWASHER	4
(C) 16	4B1237	SCREW	24
(C) 17	8F1434	LOCKWASHER	24
(C) 18	7L893	SHOCKMOUNT-----(Right Hand)	3

REF NO	PART NUMBER	DESCRIPTION	QTY
(C) 19	S-1614	BOLT	6
(C) 20	7F9223	LOCKWASHER	16
21	6L9964	BRACKET ASSEM.	1
22	2B7408	PLUG	1
23	1B5174	PLUG	1
24	2B7409	PLUG	1
25	7L7398	BLOCK	1
26	7L7402	STRAP	1
27	7L7392	BOOT	1
28	2H8533	SCREW	4
29	7L7400	CAPACITOR	1
30	7L7397	RESISTOR ASSEM.	1
31	7L6745	FUSE	2
32	4B1258	SCREW	2
33	7L7378	BRACKET ASSEM.	1
(C) 34	7L227	SHOCKMOUNT----(Left Hand)	3
35	9F9327	BOLT	4
36	2D6249	SCREW	8
37	4B1220	SCREW	1
	9B7233	LOCKWASHER	1
38	3K8190	SCREW	8
39	6L8311	COVER	1
	6L6523	LABEL--------(Instruction)	1
	7L6738	WIRING DIAGRAM	1
40	7L7395	EXCITER AND REGULATOR ASSEM. (See Separate Illustration)	1
	6L6421	LABEL---------(Warning)	1

122323

7L31 GENERATOR—287-575 Volt—60 Cycle, 3 Phase—End View—Type 2
Effective with Generator Serial No. 250TG1
7L7395 Exciter and Regulator Assembly parts are shown on Page 171B

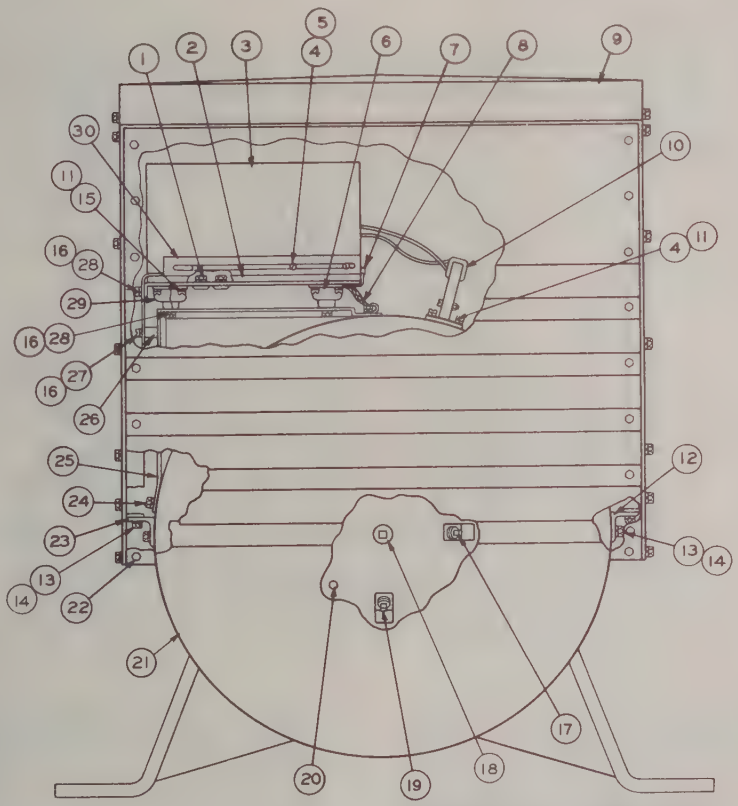


REF. NO	PART NUMBER	DESCRIPTION	QTY
1	5L7189	HOLDER ASSEM.	2
		Each consisting of:	
	5L7190	HOLDER	1
2	3B4604	COTTER PIN	2
	2L2073	WASHER	4
3	2L2076	PIN	2
4	2L4853	ARM	2
5	2L2074	SPRING	2
6	S1614	BOLT	2
7	3B4504	LOCKWASHER	4
8	S1615	BOLT	2
9	1N9057	PANEL-(Front)	1
10	1N9053	CHANNEL	1
11	7L7385	COVER	1
12	2D6249	SCREW	8
13	7F9223	LOCKWASHER	24
14	7L7384	SCREEN	1
15	7L7386	FAN	1
16	7L7403	DEFLECTOR	1
17	S1614	BOLT	8
18	1N9206	STATOR ASSEM.	1
	7L7377	CHANNEL	1
		(Part of 1N9206 Stator Assem.)	
19	1B4367	BOLT	6
20	3B4510	LOCKWASHER	6
21	7L7454	RETAINER & YOKE ASSEM.	1
	2L4849	TUBE-(Long)	2
	2L5592	TUBE-(Short)	2
		(Parts of 7L7454 Retainer & Yoke Assem.)	

REF. NO	PART NUMBER	DESCRIPTION	QTY
22	4L6677	BEARING	1
23	1N8620	RING	1
24	1N8618	ROTOR ASSEM.	1
25	7L7382	HUB	1
26	4B1258	SCREW	2
27	7L7381	DISC	1
28	4B1259	SCREW	2
29	7L7380	FAN	1
30	6L7008	CLAMP	2
31	3H3627	SCREW	2
32	9B7233	LOCKWASHER	2
33	2L2122	RING ASSEM.-(Inner)	1
	2L4845	NUT	2
		(Part of 2L2122 Ring Assem.)	
34	2L2123	RING ASSEM.-(Outer)	1
		(Parts of 1N8618 Rotor Assem.)	
	2L4844	TUBE	1
	2L4845	NUT	2
		(Parts of 2L2123 Ring Assem.)	
35	1N9060	LOUVER	4
36	7L7383	BRACKET	1
37	S509	BOLT	60
38	9F5644	LOCKWASHER	60
39	1N9055	FRAME ASSEM.-(Right Hand)	1
	1N9054	FRAME ASSEM.-(Left Hand)	1
40	1N9061	PANEL-(Meter)	1
41	1N9059	PANEL-(Side)	2
42	5L7191	BRUSH	4

124400

7L91 GENERATOR—3 Phase—Side View
Generator Serial No. 250TG1500 to 250TG1999 inclusive. 287-575 Volt, 60 hertz at 1200 R.P.M. or 230-460 volt, 50 hertz at 1000 R.P.M.

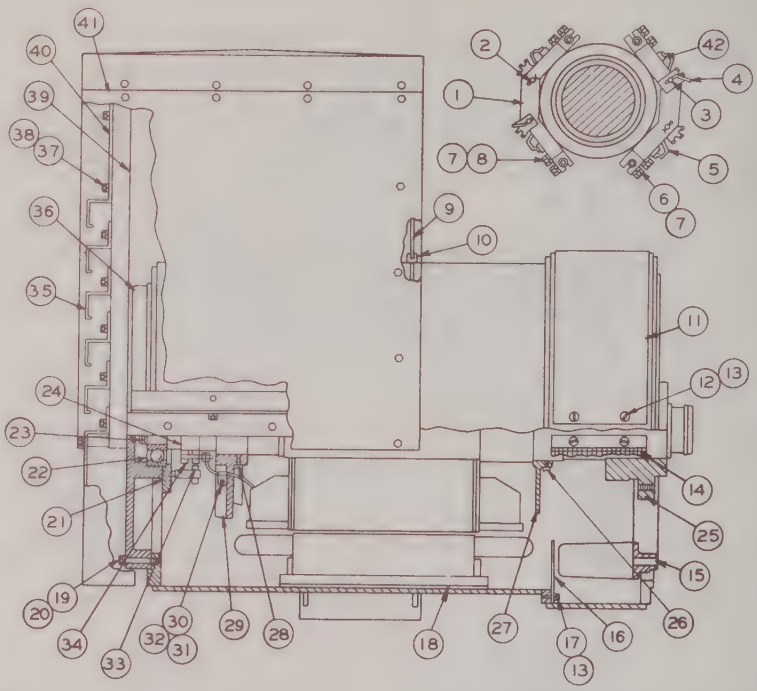


REF. NO.	PART NUMBER	DESCRIPTION	QTY
1	S1613	BOLT	4
	1H3244	LOCKWASHER	4
2	8L9821	SUPPORT ASSEM.	1
3	1N9062	EXCITER & REGULATOR ASSEM. (See Separate Illustration)	1
4	9F9327	SCREW	8
5	8F1434	LOCKWASHER	4
6	8L5477	SHOCKMOUNT	3
7	8L8602	CHANNEL	1
8	8L5476	STRAP	1
9	1N9056	COVER	1
10	7L7394	DROOP TRANSFORMER ASSEM.	1
11	9F5599	LOCKWASHER	20
12	1N5383	BRACKET	1
13	S509	BOLT	14
14	8F3590	LOCKWASHER	14
15	4B1237	SCREW	16
16	7F9223	LOCKWASHER	8
17	2B7408	PLUG	1

REF. NO.	PART NUMBER	DESCRIPTION	QTY
18	1B5174	PLUG	1
19	2B7409	PLUG	1
20	S1573	BOLT	4
	3B4508	LOCKWASHER	4
21	1N9058	COVER ASSEM.	1
22	L1143	BOLT	2
	9F5644	LOCKWASHER	2
23	1N5364	BRACKET	1
24	2H3755	BOLT	6
	1H7186	LOCKWASHER	6
25	1N9063	BRACKET	2
26	8L9826	SPACER	2
27	4B1258	SCREW	2
28	S1614	BOLT	4
29	7L893	SHOCKMOUNT	1
30	8L9823	GUIDE	2
	8L5656	WIRING DIAGRAM	1
	6L6523	LABEL-------(Instruction)-------	1
	7L860	KIT--------(Stator Rewind)--------	1
	7L7405	KIT-----(Rotor Balance Weight)----	1

124401

7L91 GENERATOR—3 Phase—End View
Generator Serial No. 250TG1500 to 250TG1999 inclusive. 287-575
Volt, 60 hertz at 1200 R.P.M. or 230-460 Volt, 50 hertz at 1000 R.P.M. 1N9062
Exciter and Regulator parts are shown on Pages 171E and 171F

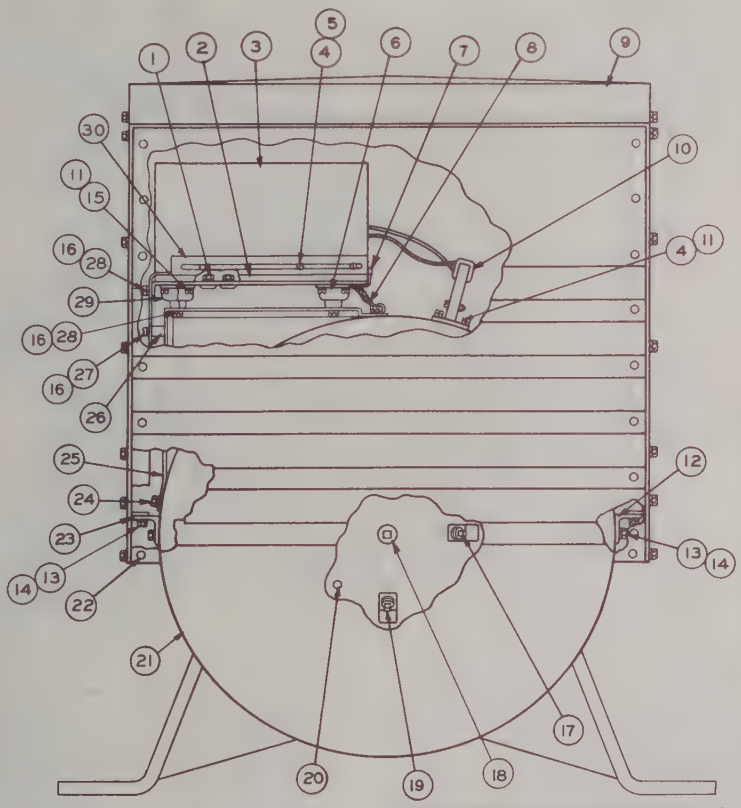


REF NO.	PART NUMBER	DESCRIPTION	QTY
1	5L7189	HOLDER ASSEM.	2
		Each consisting of:	
	5L7190	HOLDER	1
2	3B4604	COTTER PIN	2
	2L2073	WASHER	4
3	2L2076	PIN	2
4	2L4853	ARM	2
5	2L2074	SPRING	2
6	S1614	BOLT	2
7	3B4504	LOCKWASHER	4
8	S1615	BOLT	2
9	1N9057	PANEL----------(Front)----------	1
10	1N9053	CHANNEL	1
11	7L7385	COVER	1
12	2D6249	SCREW	8
13	7F9223	LOCKWASHER	16
14	7L7384	SCREEN	1
15	7L7386	FAN	1
16	7L7403	DEFLECTOR	1
17	S1614	BOLT	8
18	2N5652	STATOR ASSEM.	1
	7L7377	CHANNEL	1
		(Part of 2N5652 Stator Assem.)	
19	1B4367	BOLT	6
20	3B4510	LOCKWASHER	6
21	7L7454	RETAINER & YOKE ASSEM.	1
	2L4849	TUBE----------(Long)----------	2
	2L5592	TUBE----------(Short)----------	2
		(Parts of 7L7454 Retainer & Yoke Assem.)	

REF NO.	PART NUMBER	DESCRIPTION	QTY
22	4L6677	BEARING	1
23	1N8620	RING	1
24	1N8618	ROTOR ASSEM.	1
25	7L7382	HUB	1
26	4B1258	SCREW	2
27	7L7381	DISC	1
28	4B1259	SCREW	2
29	7L7380	FAN	1
30	6L7008	CLAMP	2
31	3H3627	SCREW	2
32	9B7233	LOCKWASHER	2
33	2L2122	RING ASSEM. -----(Inner)------	1
	2L4845	NUT	2
		(Part of 2L2122 Ring Assem.)	
34	2L2123	RING ASSEM. -----(Outer)------	1
		(Parts of 1N8618 Rotor Assem.)	
	2L4844	TUBE	1
	2L4845	NUT	2
		(Parts of 2L2123 Ring Assem.)	
35	1N9060	LOUVER	4
36	7L7383	BRACKET	1
37	S509	BOLT	60
38	9F5644	LOCKWASHER	60
39	1N9055	FRAME ASSEM. ----(Right Hand)---	1
	1N9054	FRAME ASSEM. ----(Left Hand)-----	1
40	1N9061	PANEL----------(Meter)----------	1
41	1N9059	PANEL----------(Side)----------	2
42	5L7191	BRUSH	4

127905

8L33 GENERATOR—3 Phase—Side View—Type 1—Replaces 7L91
Generator Serial No. 250TG2000 to 250TG2999 inclusive. 230-460 Volt, 50 hertz at 1000 R.P.M. or 287-575 Volt, 60 hertz at 1200 R.P.M.

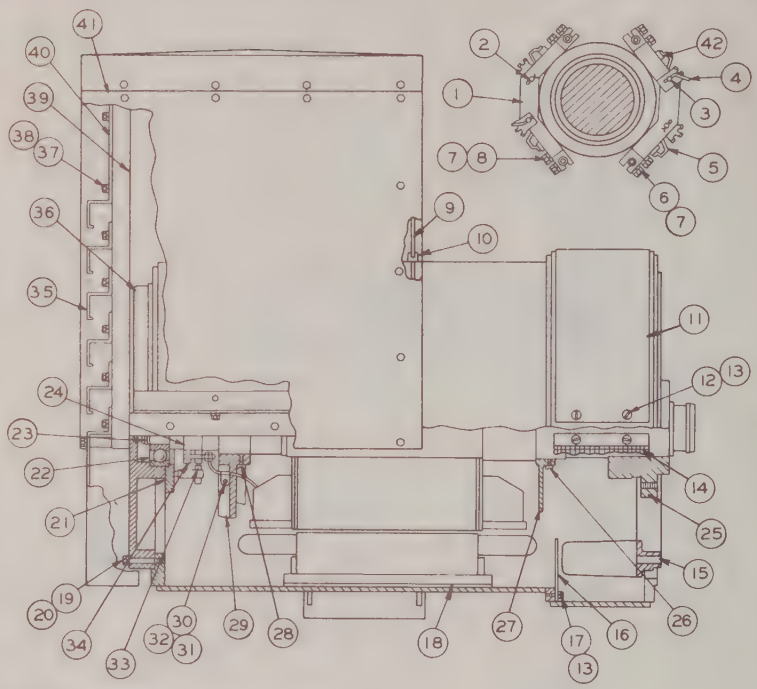


REF. NO.	PART NUMBER	DESCRIPTION	QTY
1	S1613	BOLT	4
	1H3244	LOCKWASHER	4
2	8L9821	SUPPORT ASSEM.	1
3	1N8507	EXCITER & REGULATOR ASSEM. (See Separate Illustration)	1
4	9F9327	SCREW	8
5	8F1434	LOCKWASHER	4
6	8L5477	SHOCKMOUNT	3
7	8L8602	CHANNEL	1
8	8L5476	STRAP	1
9	1N9056	COVER	1
10	7L7394	DROOP TRANSFORMER ASSEM.	1
11	9F5599	LOCKWASHER	20
12	1N5383	BRACKET	1
13	S509	BOLT	14
14	8F3590	LOCKWASHER	14
15	4B1237	SCREW	16
16	7F9223	LOCKWASHER	8
17	2B7408	PLUG	1

REF. NO.	PART NUMBER	DESCRIPTION	QTY
18	1B5174	PLUG	1
19	2B7409	PLUG	1
20	S1573	BOLT	4
	3B4508	LOCKWASHER	4
21	1N9058	COVER ASSEM.	1
22	L1143	BOLT	2
	9F5644	LOCKWASHER	2
23	1N5364	BRACKET	1
24	2H3755	BOLT	6
	1H7186	LOCKWASHER	6
25	1N9063	BRACKET	2
26	8L9826	SPACER	2
27	4B1258	SCREW	2
28	S1614	BOLT	6
29	7L893	SHOCKMOUNT	1
30	8L9823	GUIDE	2
	2N3601	WIRING DIAGRAM	1
	6L6523	LABEL-(Instruction)	1
	2N5654	KIT-(Stator Rewind)	1
	7L7405	KIT-(Rotor Balance Weight)	1

127906

8L33 GENERATOR—3 Phase—End View—Type 1—Replaces 7L91
Generator Serial No. 250TG2000 to 250TG2999 inclusive
230-460 Volt, 50 hertz at 1000 R.P.M. or 287-575 Volt, 60 hertz at 1200 R.P.M.
1N8507 Exciter and Regulator parts are shown on Pages 171F-1 & 171F-2

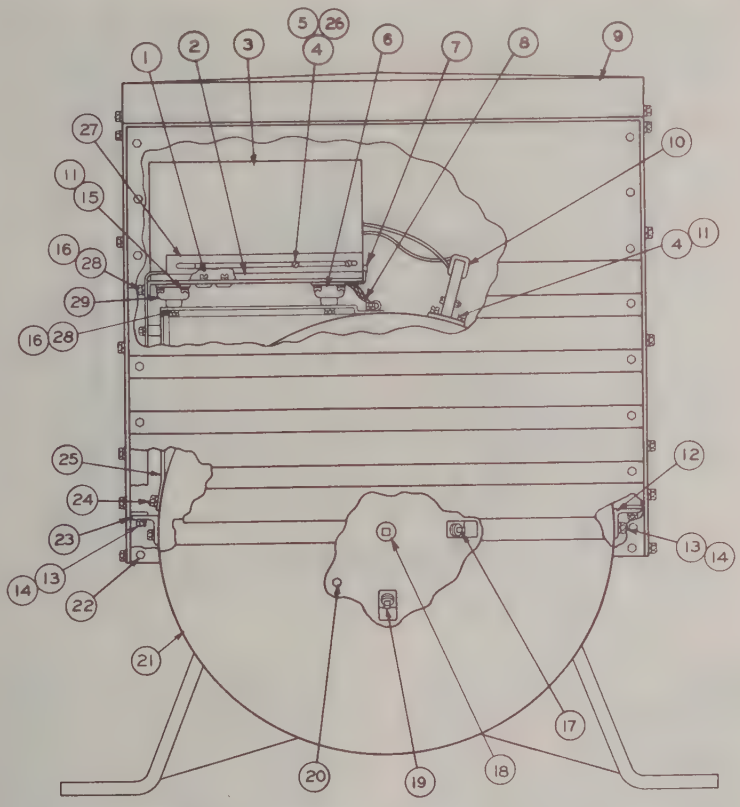


REF. NO	PART NUMBER	DESCRIPTION	QTY
1	5L7189	HOLDER ASSEM.	2
		Each consisting of:	
	5L7190	HOLDER	1
2	3B4604	COTTER PIN	2
	2L2073	WASHER	4
3	2L2076	PIN	2
4	2L4853	ARM	2
5	2L2074	SPRING	2
6	S1614	BOLT	2
7	3B4504	LOCKWASHER	4
8	S1615	BOLT	2
9	1N9057	PANEL-(Front)	1
10	1N9053	CHANNEL	1
11	7L7385	COVER	1
12	2D6249	SCREW	8
13	7F9223	LOCKWASHER	16
14	7L7384	SCREEN	1
15	7L7386	FAN	1
16	7L7403	DEFLECTOR	1
17	2A762	BOLT	8
18	2N5652	STATOR ASSEM.	1
	7L7377	CHANNEL	1
		(Part of 2N5652 Stator Assem.)	
19	1B4367	BOLT	6
20	3B4510	LOCKWASHER	6
	7L7454	RETAINER & YOKE ASSEM.	1
21	2L4849	TUBE-(Long)	2
	2L5592	TUBE-(Short)	2
		(Parts of 7L7454 Retainer & Yoke Assem.)	

22	4L6677	BEARING	1
23	1N8620	RING	1
24	1N8618	ROTOR ASSEM.	1
25	7L7382	HUB	1
26	4B1258	SCREW	2
27	7L7381	DISC	1
28	4B1259	SCREW	2
29	7L7380	FAN	1
30	6L7008	CLAMP	2
31	3H3627	SCREW	2
32	9B7233	LOCKWASHER	2
33	2L2122	RING ASSEM.-(Inner)	1
	2L4845	NUT	2
		(Part of 2L2122 Ring Assem.)	
34	2L2123	RING ASSEM.-(Outer)	1
		(Parts of 1N8618 Rotor Assem.)	
	2L4844	TUBE	1
	2L4845	NUT	2
		(Parts of 2L2123 Ring Assem.)	
35	1N9060	LOUVER	4
36	7L7383	BRACKET	1
37	S509	BOLT	60
38	9F5644	LOCKWASHER	60
39	1N9055	FRAME ASSEM.-(Right Hand)	1
	1N9054	FRAME ASSEM.-(Left Hand)	1
40	1N9061	PANEL-(Meter)	1
41	1N9059	PANEL-(Side)	2
42	5L7191	BRUSH	4

136147

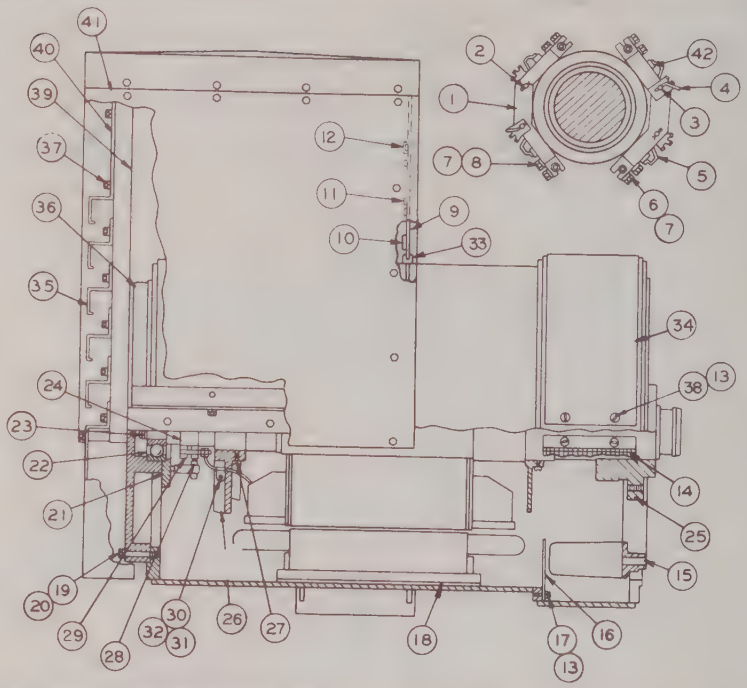
8L33 GENERATOR—3 Phase—Side View—Type 2
Generator Serial No. 250TG2000 to 250TG2999 inclusive
230-460 Volt, 50 hertz at 1000 R.P.M. or 287-575 Volt,
60 hertz at 1200 R.P.M.



REF. NO.	PART NUMBER	DESCRIPTION	QTY
1	8F5758	SCREW	4
	1H3244	LOCKWASHER	4
2	8L9821	SUPPORT ASSEM.	1
3	1N8507	EXCITER & REGULATOR ASSEM. (See Separate Illustration)	1
4	9F9327	SCREW	8
5	8F1434	LOCKWASHER	4
6	7L893	SHOCKMOUNT	1
7	8L8602	CHANNEL	1
8	8L5476	STRAP	1
9	1N9056	COVER	1
10	7L7394	DROOP TRANSFORMER ASSEM.	1
11	9F5599	LOCKWASHER	20
12	1N5383	BRACKET	1
13	S509	BOLT	14
14	8F3590	LOCKWASHER	14
15	7S4346	SCREW	16
16	7F9223	LOCKWASHER	6
17	2B7408	PLUG	1
18	1B5174	PLUG	1
19	2B7409	PLUG	1
20	S1573	BOLT	4
	3B4508	LOCKWASHER	4
21	1N9058	COVER ASSEM.	1
22	L1143	BOLT	2
	9F5644	LOCKWASHER	2
23	1N5364	BRACKET	1
24	S1617	BOLT	6
	1H7186	LOCKWASHER	6
25	1N9063	BRACKET	2
26	4B4274	WASHER	4
27	8L9823	GUIDE	2
28	S1614	BOLT	6
29	8L5477	SHOCKMOUNT	3
	2N3601	WIRING DIAGRAM	1
	6L6523	LABEL-(Instruction)	1
	2N5654	KIT-(Stator Rewind)	1
	7L7405	KIT-(Rotor Balance Weight)	1

136148

8L33 GENERATOR—3 Phase—End View—Type 2
Generator Serial No. 250TG2000 to 250TG2999 inclusive
230-460 Volt, 50 hertz at 1000 R.P.M. or 287-575 Volt,
60 hertz at 1200 R.P.M. 1N8507 Exciter and Regulator parts are
shown on Page 171F-1 & 171F-2

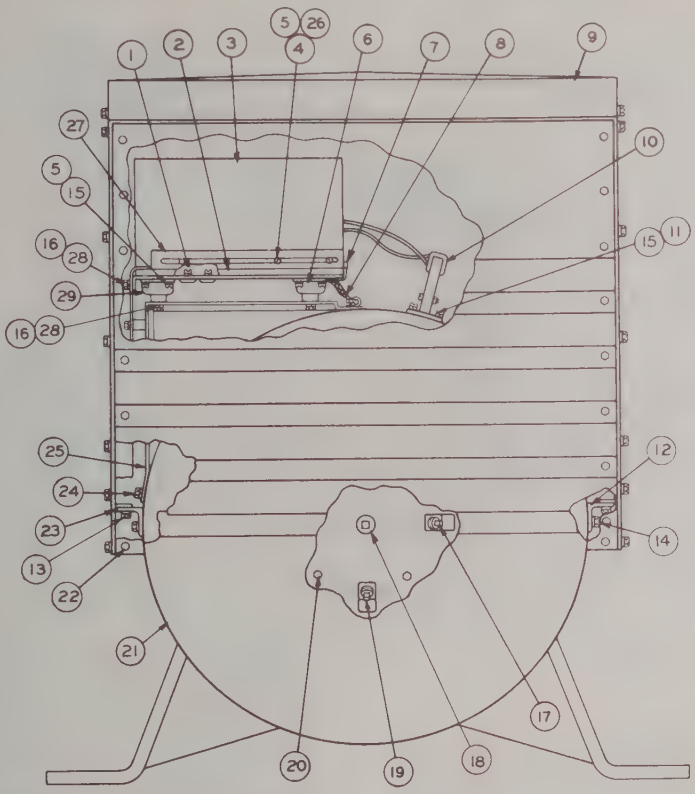


REF NO	PART NUMBER	DESCRIPTION	QTY.
1	5L7189	HOLDER ASSEM. (Each Includes)	2
	5L7190	HOLDER	1
2	3B4604	COTTER PIN	2
	2L2073	WASHER	4
3	2L2076	PIN	2
4	2L4853	ARM	2
5	2L2074	SPRING	2
6	S1614	BOLT	2
7	3B4504	LOCKWASHER	4
8	S1615	BOLT	2
C 9	5N3166	PANEL ASSEM. --(front)-- (Includes)	1
10	4F8711	PLUG	1
11	5N3174	PLUG	6
12	5N3175	PLUG	1
13	7F9223	LOCKWASHER	16
14	7L7384	SCREEN	1
15	7L7386	FAN	1
16	7L7403	DEFLECTOR	1
17	2A762	BOLT	8
C 18	3N6294	STATOR ASSEM. (Includes)	1
	7L7377	CHANNEL	1
19	1B4367	BOLT	6
20	3B4510	LOCKWASHER	6
21	7L7454	RETAINER & YOKE ASSEM. (Includes)	1
	2L4849	TUBE-----(long)	2
	2L5592	TUBE-----(short)	2
22	4L6677	BEARING	1
23	1N8620	RING	1
C 24	3N6291	ROTOR ASSEM. (Includes)	1
25	7L7382	HUB	1
C 26	2N7751	FAN ASSEM. (Includes)	1
27	2N7736	SCREW	1
	FM055243	FORM (Instructions for Installing Fan Assem. and Disc.)	1
28	2L2122	RING ASSEM. ----(inner)----- (Includes)	1
	2L4845	NUT	2
29	2L2123	RING ASSEM. --(outer)--- (Includes)	1
	2L4844	TUBE ASSEM.	1
	2L4845	NUT	2
30	6L7008	CLAMP	2
31	3H3627	SCREW	2
32	9B7233	LOCKWASHER	2
33	1N9053	CHANNEL	1
34	7L7385	COVER	1
35	1N9060	LOUVER	4
36	7L7383	BRACKET	1
37	313414	SCREW	60
C 38	310243	SCREW	8
39	1N9055	FRAME ASSEM. ---(R. H.)---	1
	1N9054	FRAME ASSEM. ---(L. H.)---	1
40	1N9061	PANEL--------(meter)---	1
41	1N9059	PANEL--------(side)---	2
42	5L7191	BRUSH	4

175823

C INDICATES CHANGE

8L33 GENERATOR—3 Phase—Side View
Generator Serial No. 250TG3000—Up
230-460 Volt, 50 hertz at 1000 R.P.M. or 287-575 Volt, 60 hertz at 1200 R.P.M.

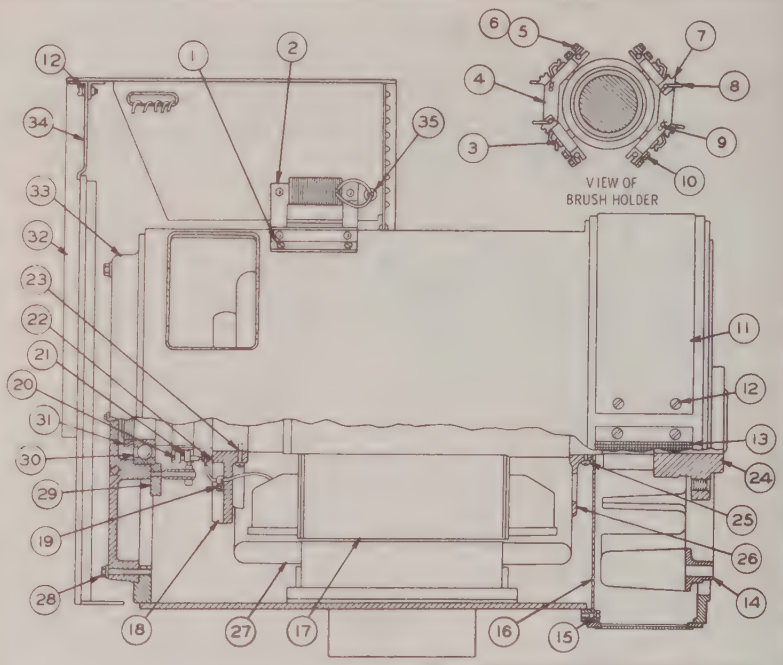


REF. NO.	PART NUMBER	DESCRIPTION	QTY.
1	8F5758	SCREW	4
1	1H3244	LOCKWASHER	4
2	8L9821	SUPPORT ASSEM.	1
C 3	3N4692	EXCITER & REGULATOR ASSEM. (Separate Illustration)	1
C 4	9F9327	SCREW	4
C 5	8F1434	LOCKWASHER	20
6	7L893	SHOCKMOUNT	1
7	8L8602	CHANNEL	1
8	8L5476	STRAP	1
9	1N9056	COVER	1
10	7L7394	DROOP TRANSFORMER ASSEM.	1
C 11	9F5599	LOCKWASHER	4
12	1N5383	BRACKET	1
C 13	313414	SCREW	8
C 14	319831	SCREW	6
C 15	7S4346	SCREW	20
C 16	7F9223	LOCKWASHER	4
17	2B7408	PLUG	1
18	1B5174	PLUG	1
19	2B7409	PLUG	1
20	S1573	BOLT	4
20	3B4508	LOCKWASHER	4
21	1N9058	COVER ASSEM.	1
22	L1143	BOLT	2
22	9F5644	LOCKWASHER	2
23	1N5364	BRACKET	1
24	S1617	BOLT	6
24	1H7186	LOCKWASHER	6
25	1N9063	BRACKET	2
26	4B4274	WASHER	4
27	8L9823	GUIDE	2
28	S1614	BOLT	6
29	8L5477	SHOCKMOUNT	3
C ▲	3N4694	WIRING DIAGRAM	1
C	6L6523	FILM-----(instruction)	1
	2N5654	KIT-------(stator rewind)	1
	7L7405	KIT-------(rotor balance weight)	1

175824

▲ NOT SHOWN C INDICATES CHANGE

8L33 GENERATOR—3 Phase—End View
Generator Serial No. 250TG3000—Up. 230-460 Volt, 50 hertz at 1000 R.P.M. or 287-575 Volt, 60 hertz at 1200 R.P.M. 3N4692 Exciter & Regulator parts are shown on Pages 171F-5 & 171F-6

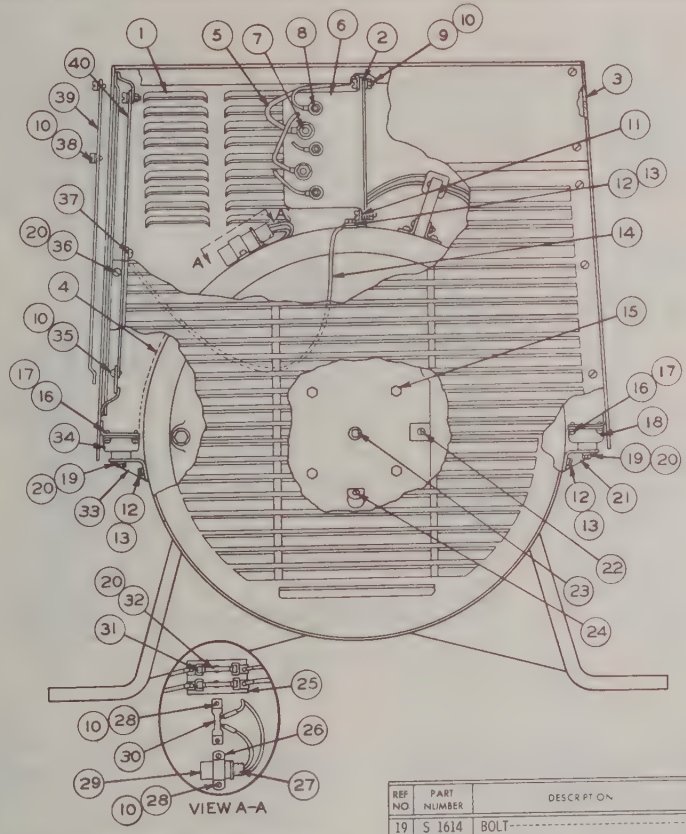


REF NO	PART NUMBER	DESCRIPTION	QTY
1	9F9327	SCREW	4
	9F5599	LOCKWASHER	4
2	6L7009	DROOP TRANSFORMER ASSEM.	1
3	5L7191	BRUSH	4
	5L7189	HOLDER ASSEM. -(Brush)-	2
		Each consisting of:	
4	5L7190	HOLDER	1
5	S 1614	BOLT	2
6	3B4504	LOCKWASHER	4
7	2L4853	ARM	2
8	2L2074	SPRING	2
	2L2076	PIN	2
9	3B4604	COTTER PIN	2
	2L2073	WASHER	4
10	S 1615	BOLT	2
11	7L7385	COVER	1
12	2D6249	SCREW	13
	7F9223	LOCKWASHER	21
13	7L7384	SCREEN	1
14	7L7386	FAN	1
15	S 1614	BOLT	8
16	7L7403	DEFLECTOR	1

REF NO	PART NUMBER	DESCRIPTION	QTY
17	7L7449	ROTOR ASSEM.	1
18	7L7380	FAN	1
	6L7008	CLAMP	2
19	3H3627	SCREW	2
	9B7233	LOCKWASHER	2
20	2L2123	RING ASSEM. -(Outer)-	1
21	2L2122	RING ASSEM. -(Inner)-	1
22	2L4845	NUT	4
		(2 in each 2L2123 & 2L2122 Ring Assem.)	
23	4B1259	SCREW	2
24	7L7382	HUB	1
25	4B1258	SCREW	2
26	7L7381	DISC	1
		(Parts of 7L7449 Rotor Assem.)	
27	8L9594	STATOR ASSEM.	1
	7L7377	CHANNEL	1
		(Part of 8L9594 Stator Assem.)	
28	1B4367	BOLT	6
	3B4510	LOCKWASHER	6
29	7L7454	RETAINER AND YOKE ASSEM.	1
	2L4849	TUBE -(Long)-	2
	2L5592	TUBE -(Short)-	2
		(Parts of 7L7454 Retainer & Yoke Assem.)	
30	4L6677	BEARING	1
31	5F7404	NUT	1
	5F7403	LOCK	1
32	7L7391	COVER ASSEM.	1
33	7L7383	BRACKET	1
34	7L7393	PANEL	1
35	8L3948	GROMMET	1
		The following Repair Kits are available:	
	8L9595	KIT -(Stator Rewind)-	1
	7L7405	KIT -(Rotor Balance Weight)-	1

123281

7L32 GENERATOR—2400 Volt—60 Cycle, 3 Phase—Side View
Effective with Generator Serial No. 250TN1

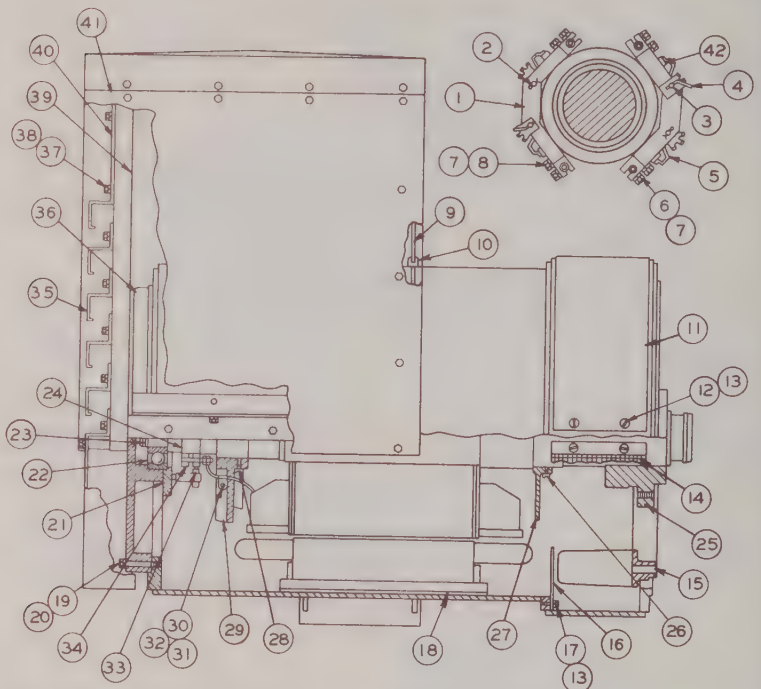


REF NO	PART NUMBER	DESCRIPTION	QTY
1	7L7387	BOX ASSEM.	1
2	7L7390	CHANNEL	1
3	7L7389	GASKET SET	1
4	7L7388	CHANNEL	1
		(Parts of 7L7387 Box Assem.)	
5	7L7399	WIRING HARNESS	1
6	7L6827	NOISE SUPPRESSION ASSEM.	1
7	1B4330	NUT	6
	3B4504	LOCKWASHER	6
8	1B2578	NUT	4
	3B4506	LOCKWASHER	4
		(Parts of 7L6827 Noise Suppression Assem.)	
9	6L7104	SCREW	8
10	9F5599	LOCKWASHER	24
11	7L4206	STRAP	1
12	2H3755	BOLT	7
13	1H7186	LOCKWASHER	7
14	7L7396	CABLE ASSEM.	1
15	S 1573	BOLT	4
	3B4508	LOCKWASHER	4
16	4B1237	SCREW	24
17	8F1434	LOCKWASHER	24
18	7L893	SHOCKMOUNT-----(Right Hand)	3

REF NO	PART NUMBER	DESCRIPTION	QTY
19	S 1614	BOLT	6
20	7F9223	LOCKWASHER	10
21	6L9964	BRACKET ASSEM.	1
22	2B7408	PLUG	1
23	1B5174	PLUG	1
24	2B7409	PLUG	1
25	7L7398	BLOCK	1
26	7L7402	STRAP	1
27	7L7392	BOOT	1
28	2H8533	SCREW	4
29	7L7400	CAPACITOR	1
30	7L7397	RESISTOR ASSEM.	1
31	7L6745	FUSE	2
32	4B1258	SCREW	2
33	7L7378	BRACKET ASSEM.	1
34	7L227	SHOCKMOUNT----(Left Hand)	3
35	9F9327	BOLT	4
36	2D6249	SCREW	8
37	4B1220	SCREW	1
	9B7233	LOCKWASHER	1
38	3K8190	SCREW	8
39	6L8311	COVER	1
	6L6523	LABEL----(Instruction)	1
	8L5801	WIRING DIAGRAM	1
40	8L9600	EXCITER AND REGULATOR ASSEM. (See Separate Illustration)	1
	6L6421	LABEL---------(Warning)	1

123282

7L32 GENERATOR—2400 Volt—60 Cycle, 3 Phase—End View
Effective with Generator Serial No. 250TN1
8L9600 Exciter and Regulator Assembly parts are shown on Page 171D

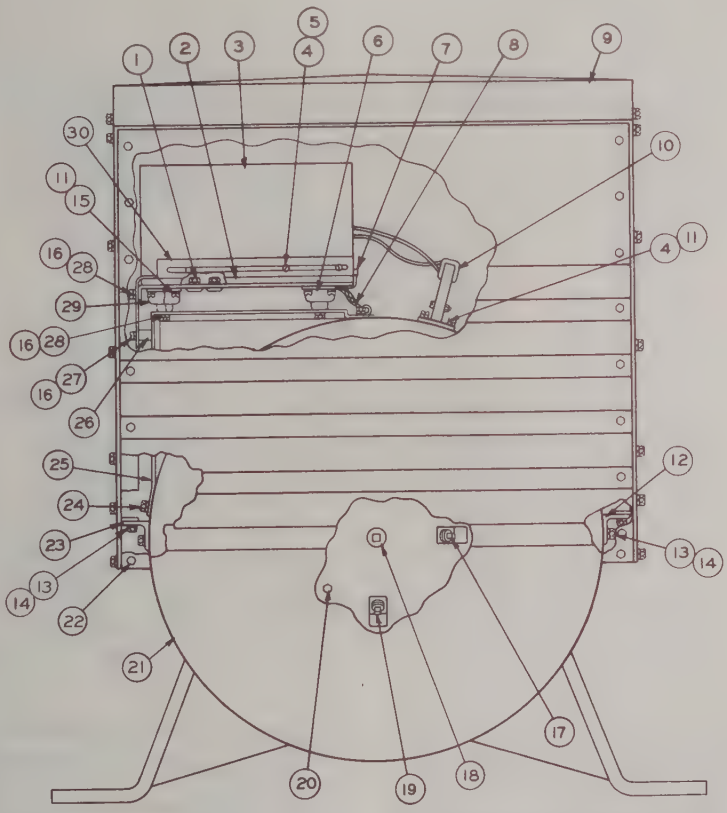


REF NO.	PART NUMBER	DESCRIPTION	QTY
1	5L7189	HOLDER ASSEM.	2
		Each consisting of:	
	5L7190	HOLDER	1
2	3B4604	COTTER PIN	2
	2L2073	WASHER	4
3	2L2076	PIN	2
4	2L4853	ARM	2
5	2L2074	SPRING	2
6	S1614	BOLT	2
7	3B4504	LOCKWASHER	4
8	S1615	BOLT	2
9	1N9057	PANEL----------(Front)----------	1
10	1N9053	CHANNEL	1
11	7L7385	COVER	1
12	2D6249	SCREW	8
13	7F9223	LOCKWASHER	24
14	7L7384	SCREEN	1
15	7L7386	FAN	1
16	7L7403	DEFLECTOR	1
17	S1614	BOLT	8
18	1N9204	STATOR ASSEM.	1
	7L7377	CHANNEL	1
		(Part of 1N9204 Stator Assem.)	
19	1B4367	BOLT	6
20	3B4510	LOCKWASHER	6
21	7L7454	RETAINER & YOKE ASSEM.	1
	2L4849	TUBE----------(Long)----------	2
	2L5592	TUBE----------(Short)----------	2
		(Parts of 7L7454 Retainer & Yoke Assem.)	

REF NO.	PART NUMBER	DESCRIPTION	QTY
22	4L6677	BEARING	1
23	1N8620	RING	1
24	1N8618	ROTOR ASSEM.	1
25	7L7382	HUB	1
26	4B1258	SCREW	2
27	7L7381	DISC	1
28	4B1259	SCREW	2
29	7L7380	FAN	1
30	6L7008	CLAMP	2
31	3H3627	SCREW	2
32	9B7233	LOCKWASHER	2
33	2L2122	RING ASSEM. -----(Inner)------	1
	2L4845	NUT	2
		(Part of 2L2122 Ring Assem.)	
34	2L2123	RING ASSEM. -----(Outer)------	1
		(Parts of 1N8618 Rotor Assem.)	
	2L4844	TUBE	1
	2L4845	NUT	2
		(Parts of 2L2123 Ring Assem.)	
35	1N9060	LOUVER	4
36	7L7383	BRACKET	1
37	S509	BOLT	60
38	9F5644	LOCKWASHER	60
39	1N9055	FRAME ASSEM. ----(Right Hand)---	1
	1N9054	FRAME ASSEM. ----(Left Hand)-----	1
40	1N9061	PANEL----------(Meter)----------	1
41	1N9059	PANEL----------(Side)----------	2
42	5L7191	BRUSH	4

124318

7L92 GENERATOR—3 Phase—Side View
Generator Serial No. 250TN1500 to 250TN1999 inclusive
2400 Volt, 60 hertz at 1200 R.P.M.

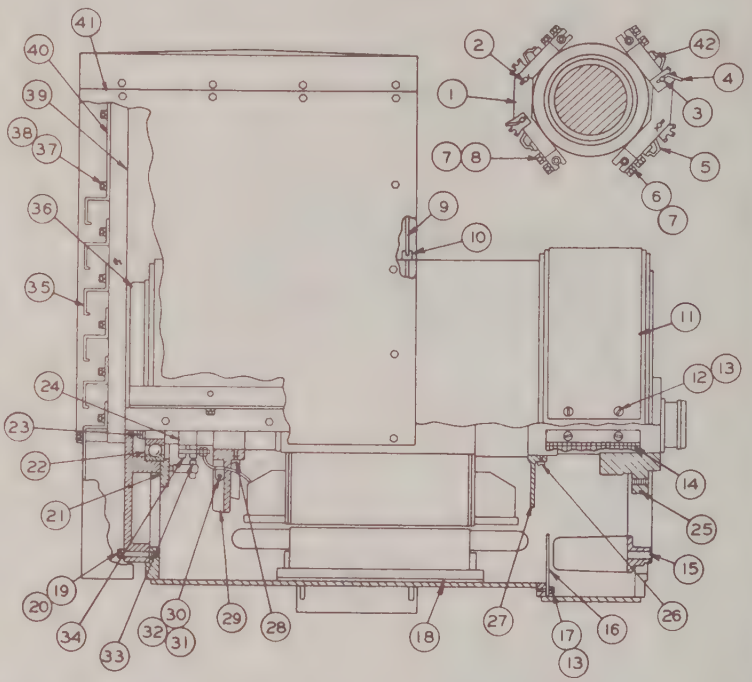


REF NO.	PART NUMBER	DESCRIPTION	QTY
1	S1613	BOLT	4
	1H3244	LOCKWASHER	4
2	8L9821	SUPPORT ASSEM.	1
3	1N9205	EXCITER & REGULATOR ASSEM. (See Separate Illustration)	1
4	9F9327	SCREW	8
5	8F1434	LOCKWASHER	4
6	8L5477	SHOCKMOUNT	3
7	8L8602	CHANNEL	1
8	8L5476	STRAP	1
9	1N9056	COVER	1
10	7L7394	DROOP TRANSFORMER ASSEM.	1
11	9F5599	LOCKWASHER	20
12	1N5383	BRACKET	1
13	S509	BOLT	14
14	8F3590	LOCKWASHER	14
15	4B1237	SCREW	16
16	7F9223	LOCKWASHER	8
17	2B7408	PLUG	1
18	1B5174	PLUG	1
19	2B7409	PLUG	1
20	S1573	BOLT	4
	3B4508	LOCKWASHER	4

REF. NO.	PART NUMBER	DESCRIPTION	QTY
21	1N9058	COVER ASSEM.	1
22	L1143	BOLT	2
	9F5644	LOCKWASHER	2
23	1N5364	BRACKET	1
24	2H3755	BOLT	6
	1H7186	LOCKWASHER	6
25	1N9063	BRACKET	2
26	8L9826	SPACER	2
27	4B1258	SCREW	2
28	S1614	BOLT	4
29	7L893	SHOCKMOUNT	1
30	8L9823	GUIDE	2
	7B2742	BOLT	1
	1B4330	NUT	1
	7F9223	LOCKWASHER (Not Shown - Use for Grounding Warning Tag)	1
	8L5656	WIRING DIAGRAM	1
	6L6523	LABEL--------(Instruction)	1
	8L9595	KIT--------(Stator Rewind)	1
	7L7405	KIT-----(Rotor Balance Weight)	1

124319

7L92 GENERATOR—3 Phase—End View
Generator Serial No. 250TN1500 to 250TN1999 inclusive. 2400 Volt, 60 hertz at 1200 R.P.M. 1N9205 Exciter and Regulator parts are shown on Pages 171G & 171H

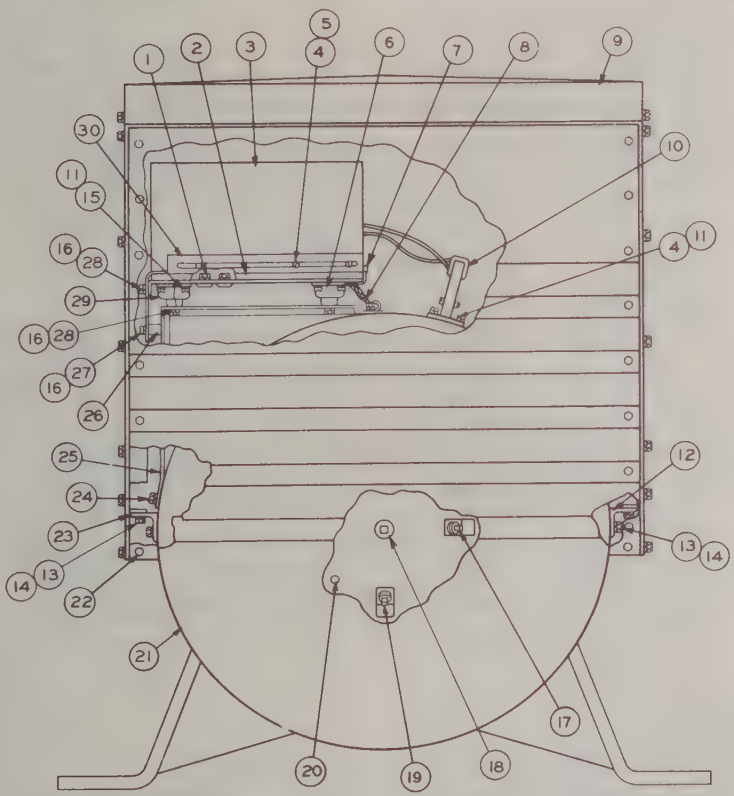


REF NO.	PART NUMBER	DESCRIPTION	QTY
1	5L7189	HOLDER ASSEM.	2
		Each consisting of:	
	5L7190	HOLDER	1
2	3B4604	COTTER PIN	2
	2L2073	WASHER	4
3	2L2076	PIN	2
4	2L4853	ARM	2
5	2L2074	SPRING	2
6	S1614	BOLT	2
7	3B4504	LOCKWASHER	4
8	S1615	BOLT	2
9	1N9057	PANEL-----(Front)-----	1
10	1N9053	CHANNEL	1
11	7L7385	COVER	1
12	2D6249	SCREW	8
13	7F9223	LOCKWASHER	16
14	7L7384	SCREEN	1
15	7L7386	FAN	1
16	7L7403	DEFLECTOR	1
17	S1614	BOLT	8
18	2N5653	STATOR ASSEM.	1
	7L7377	CHANNEL	1
		(Part of 2N5653 Stator Assem.)	
19	1B4367	BOLT	6
20	3B4510	LOCKWASHER	6
21	7L7454	RETAINER & YOKE ASSEM.	1
	2L4849	TUBE-----(Long)-----	2
	2L5592	TUBE-----(Short)-----	2
		(Parts of 7L7454 Retainer & Yoke Assem.)	

REF NO.	PART NUMBER	DESCRIPTION	QTY
22	4L6677	BEARING	1
23	1N8620	RING	1
24	1N8618	ROTOR ASSEM.	1
25	7L7382	HUB	1
26	4B1258	SCREW	2
27	7L7381	DISC	1
28	4B1259	SCREW	2
29	7L7380	FAN	1
30	6L7008	CLAMP	2
31	3H3627	SCREW	2
32	9B7233	LOCKWASHER	2
33	2L2122	RING ASSEM. -----(Inner)-----	1
	2L4845	NUT	2
		(Part of 2L2122 Ring Assem.)	
34	2L2123	RING ASSEM. -----(Outer)-----	1
		(Parts of 1N8618 Rotor Assem.)	
	2L4844	TUBE	1
	2L4845	NUT	2
		(Parts of 2L2123 Ring Assem.)	
35	1N9060	LOUVER	4
36	7L7383	BRACKET	1
37	S509	BOLT	60
38	9F5644	LOCKWASHER	60
39	1N9055	FRAME ASSEM. ----(Right Hand)---	1
	1N9054	FRAME ASSEM. ----(Left Hand)-----	1
40	1N9061	PANEL-----(Meter)-----	1
41	1N9059	PANEL-----(Side)-----	2
42	5L7191	BRUSH	4

127907

8L34 GENERATOR—3 Phase—Side View—Type 1—Replaces 7L92
Generator Serial No. 250TN2000 to 250TN2999 inclusive
2400 Volt, 60 hertz at 1200 R.P.M.

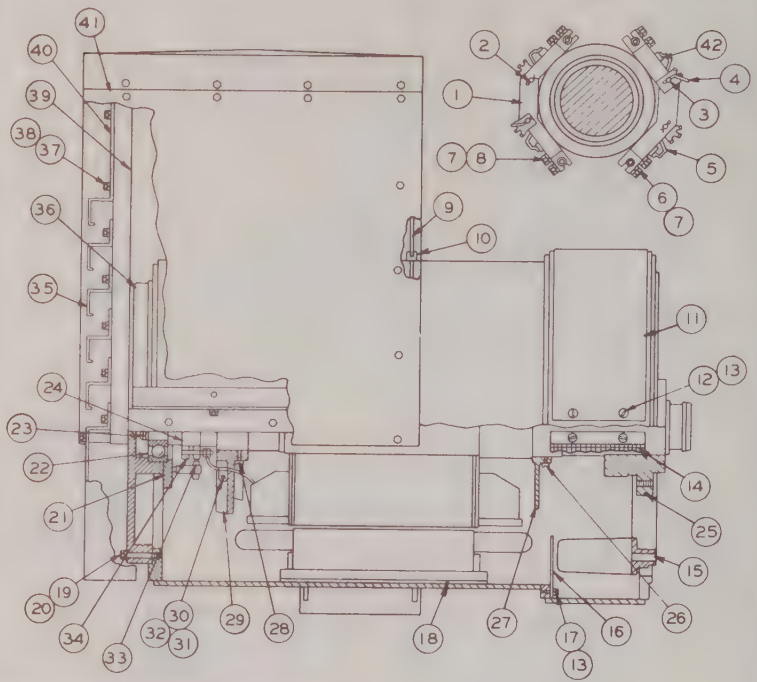


REF. NO.	PART NUMBER	DESCRIPTION	QTY
1	S1613	BOLT	4
	1H3244	LOCKWASHER	4
2	8L9821	SUPPORT ASSEM.	1
3	2N5990	EXCITER & REGULATOR ASSEM. (See Separate Illustration)	1
4	9F9327	SCREW	8
5	8F1434	LOCKWASHER	4
6	8L5477	SHOCKMOUNT	3
7	8L8602	CHANNEL	1
8	8L5476	STRAP	1
9	1N9056	COVER	1
10	6L7009	DROOP TRANSFORMER ASSEM.	1
11	9F5599	LOCKWASHER	20
12	1N5383	BRACKET	1
13	S509	BOLT	14
14	8F3590	LOCKWASHER	14
15	4B1237	SCREW	16
16	7F9223	LOCKWASHER	8
17	2B7408	PLUG	1
	7B2742	BOLT	1
	1B4330	NUT	1
	7F9223	LOCKWASHER (Grounded Warning Tag-Not Shown)	1

REF. NO.	PART NUMBER	DESCRIPTION	QTY
18	1B5174	PLUG	1
19	2B7409	PLUG	1
20	S1573	BOLT	4
	3B4508	LOCKWASHER	4
21	1N9058	COVER ASSEM.	1
22	L1143	BOLT	2
	9F5644	LOCKWASHER	2
23	1N5364	BRACKET	1
24	2H3755	BOLT	6
	1H7186	LOCKWASHER	6
25	1N9063	BRACKET	2
26	8L9826	SPACER	2
27	4B1258	SCREW	2
28	S1614	BOLT	6
29	7L893	SHOCKMOUNT	1
30	8L9823	GUIDE	2
	2N3602	WIRING DIAGRAM	1
	6L6523	LABEL-------(Instruction)-------	1
	2N5655	KIT-------(Stator Rewind)-------	1
	7L7405	KIT-----(Rotor Balance Weight)----	1

127908

8L34 GENERATOR—3 Phase—End View—Type 1—Replaces 7L92
Generator Serial No. 250TN2000 to 250TN2999 inclusive
2400 Volt, 60 hertz at 1200 R.P.M. 2N5990 Exciter and Regulator
parts are shown on Pages 171J & 171K

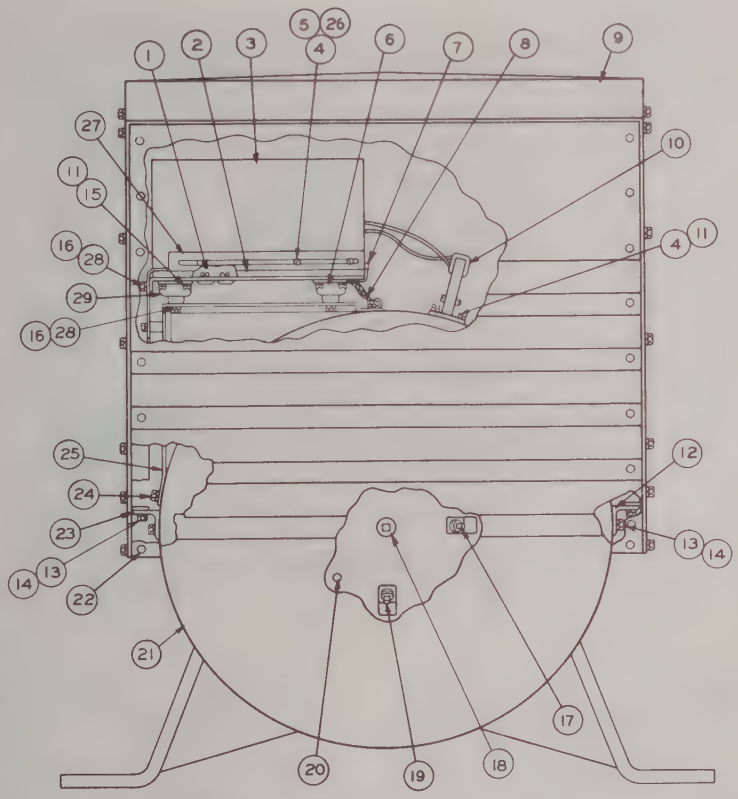


REF. NO.	PART NUMBER	DESCRIPTION	QTY
1	5L7189	HOLDER ASSEM.	2
		Each consisting of:	
	5L7190	HOLDER	1
2	3B4604	COTTER PIN	2
	2L2073	WASHER	4
3	2L2076	PIN	2
4	2L4853	ARM	2
5	2L2074	SPRING	2
6	S1614	BOLT	2
7	3B4504	LOCKWASHER	4
8	S1615	BOLT	2
9	1N9057	PANEL-(Front)	1
10	1N9053	CHANNEL	1
11	7L7385	COVER	1
12	2D6249	SCREW	8
13	7F9223	LOCKWASHER	16
14	7L7384	SCREEN	1
15	7L7386	FAN	1
16	7L7403	DEFLECTOR	1
17	2A762	BOLT	8
18	2N5653	STATOR ASSEM.	1
	7L7377	CHANNEL	1
		(Part of 2N5653 Stator Assem.)	
19	1B4367	BOLT	6
20	3B4510	LOCKWASHER	6
21	7L7454	RETAINER & YOKE ASSEM.	1
	2L4849	TUBE-(Long)	2
	2L5592	TUBE-(Short)	2
		(Parts of 7L7454 Retainer & Yoke Assem.)	

22	4L6677	BEARING	1
23	1N8620	RING	1
24	1N8618	ROTOR ASSEM.	1
25	7L7382	HUB	1
26	4B1258	SCREW	2
27	7L7381	DISC	1
28	4B1259	SCREW	2
29	7L7380	FAN	1
30	6L7008	CLAMP	2
31	3H3627	SCREW	2
32	9B7233	LOCKWASHER	2
33	2L2122	RING ASSEM.-(Inner)	1
	2L4845	NUT	2
		(Part of 2L2122 Ring Assem.)	
	2L2123	RING ASSEM.-(Outer)	1
		(Parts of 1N8618 Rotor Assem.)	
34	2L4844	TUBE	1
	2L4845	NUT	2
		(Parts of 2L2123 Ring Assem.)	
35	1N9060	LOUVER	4
36	7L7383	BRACKET	1
37	S509	BOLT	60
38	9F5644	LOCKWASHER	60
39	1N9055	FRAME ASSEM.-(Right Hand)	1
	1N9054	FRAME ASSEM.-(Left Hand)	1
40	1N9061	PANEL-(Meter)	1
41	1N9059	PANEL-(Side)	2
42	5L7191	BRUSH	4

136149

8L34 GENERATOR—3 Phase—Side View—Type 2
Generator Serial No. 250TN2000 to 250TN2999 inclusive
2400 Volt, 60 hertz at 1200 R.P.M.

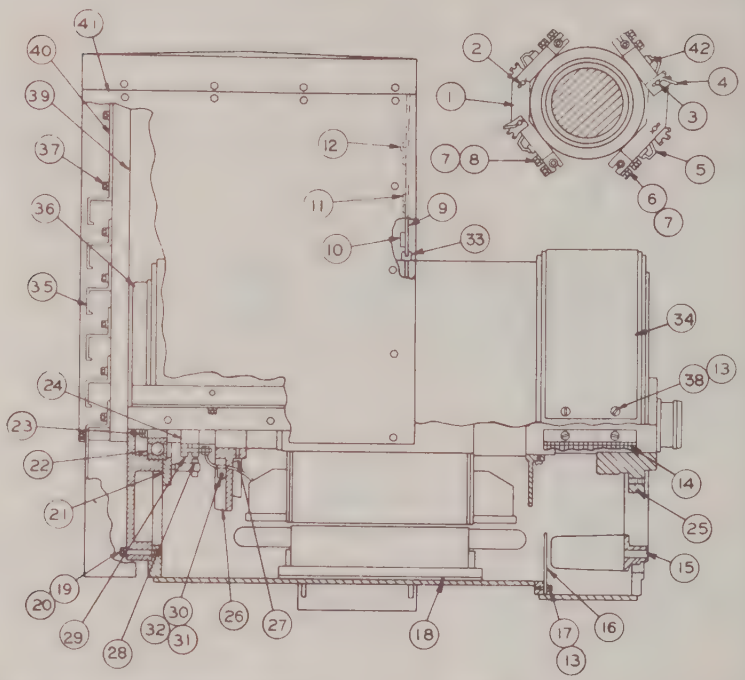


REF. NO.	PART NUMBER	DESCRIPTION	QTY
1	8F5758	SCREW	4
	1H3244	LOCKWASHER	4
2	8L9821	SUPPORT ASSEM.	1
3	2N5990	EXCITER & REGULATOR ASSEM. (See Separate Illustration)	1
4	9F9327	SCREW	8
5	8F1434	LOCKWASHER	4
6	7L893	SHOCKMOUNT	1
7	8L8602	CHANNEL	1
8	8L5476	STRAP	1
9	1N9056	COVER	1
10	6L7009	DROOP TRANSFORMER ASSEM.	1
11	9F5599	LOCKWASHER	20
12	1N5383	BRACKET	1
13	S509	BOLT	14
14	8F3590	LOCKWASHER	14
15	7S4346	SCREW	16
16	7F9223	LOCKWASHER	6
17	2B7408	PLUG	1
	7B2742	BOLT	1
	1B4330	NUT	1
	7F9223	LOCKWASHER	1
		(Grounded Warning Tag-Not Shown)	

18	1B5174	PLUG	1
19	2B7409	PLUG	1
20	S1573	BOLT	4
	3B4508	LOCKWASHER	4
21	1N9058	COVER ASSEM.	1
22	L1143	BOLT	2
	9F5644	LOCKWASHER	2
23	1N5364	BRACKET	1
24	S1617	BOLT	6
	1H7186	LOCKWASHER	6
25	1N9063	BRACKET	2
26	4B4274	WASHER	4
27	8L9823	GUIDE	2
28	S1614	BOLT	6
29	8L5477	SHOCKMOUNT	3
	2N3602	WIRING DIAGRAM	1
	6L6523	LABEL---------(Instruction)------	1
	2N5655	KIT---------(Stator Rewind)------	1
	7L7405	KIT-----(Rotor Balance Weight)---	1

136150

8L34 GENERATOR—3 Phase—End View—Type 2
Generator Serial No. 250TN2000 to 250TN2999 inclusive
2400 Volt, 60 hertz at 1200 R.P.M. 2N5990 Exciter and Regulator parts are shown on Pages 171J and 171K

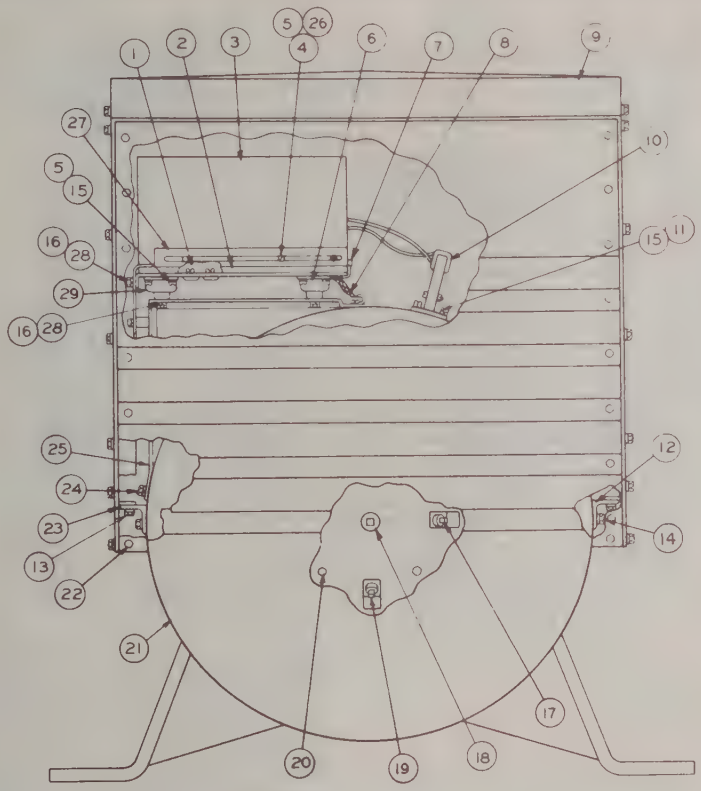


REF NO.	PART NUMBER	DESCRIPTION	QTY
1	5L7189	HOLDER ASSEM. (Each Includes)	2
	5L7190	HOLDER	1
2	3B4504	COTTER PIN	2
	2L2073	WASHER	4
3	2L2076	PIN	2
4	2L4853	ARM	2
5	2L2074	SPRING	2
6	S1614	BOLT	2
7	3B4504	LOCKWASHER	4
8	S1615	BOLT	2
C 9	5N3166	PANEL ASSEM. ---(front) (Includes)	1
10	4F8711	PLUG	1
11	5N3174	PLUG	6
12	5N3175	PLUG	1
13	7F9223	LOCKWASHER	16
14	7L7384	SCREEN	1
15	7L7386	FAN	1
16	7L7403	DEFLECTOR	1
17	2A762	BOLT	8
C 18	3N6296	STATOR ASSEM. (Includes)	1
	7L7377	CHANNEL	1
19	1B4367	BOLT	6
20	3B4510	LOCKWASHER	6
21	7L7454	RETAINER & YOKE ASSEM. (Includes)	1
	2L4849	TUBE------(long)	2
	2L5592	TUBE------(short)	2
22	4L6677	BEARING	1
23	1N8620	RING	1
C 24	3N6291	ROTOR ASSEM. (Includes)	1
25	7L7382	HUB	1
C 26	2N7751	FAN ASSEM. (Includes)	1
27	2N7736	SCREW	1
FM	055243	FORM (Instructions for Installing Fan Assem. and Disc.)	1
28	2L2122	RING ASSEM. -----(inner) (Includes)	1
	2L4845	NUT	2
29	2L2123	RING ASSEM. ---(outer) (Includes)	1
	2L4844	TUBE	1
	2L4845	NUT	2
30	6L7008	CLAMP	2
31	3H3627	SCREW	2
32	9B7233	LOCKWASHER	2
33	1N9053	CHANNEL	1
34	7L7385	COVER	1
35	1N9060	LOUVER	4
36	7L7383	BRACKET	1
C 37	313414	SCREW	60
C 38	310243	SCREW	8
39	1N9055	FRAME ASSEM. ---(R. H.)	1
	1N9054	FRAME ASSEM. ----(L. H.)	1
40	1N9061	PANEL------(meter)	1
41	1N9059	PANEL------(side)	2
42	5L7191	BRUSH	4

C INDICATES CHANGE

175825

8L34 GENERATOR—3 Phase—Side View
Generator Serial No. 250TN3000—Up
200 Volt, 60 hertz at 1200 R.P.M.



REF. NO.	PART NUMBER	DESCRIPTION	QTY.
1	8F5758	SCREW	4
	1H3244	LOCKWASHER	4
2	8L9821	SUPPORT ASSEM.	1
C 3	3N4701	EXCITER & REGULATOR ASSEM. (Separate Illustration)	1
C 4	9F9327	SCREW	4
C 5	8F1434	LOCKWASHER	20
6	7L893	SHOCKMOUNT	1
7	8L8602	CHANNEL	1
8	8L5476	STRAP	1
9	1N9056	COVER	1
10	6L7009	DROOP TRANSMISSION	1
11	9F5599	LOCKWASHER	4
12	1N5383	BRACKET	1
C 13	313414	SCREW	8
C 14	319831	SCREW	6
C 15	7S4346	SCREW	20
16	7F9223	LOCKWASHER	6
17	2B7408	PLUG	1
▲	7B2742	BOLT	1
	1B4330	NUT	1
	7F9223	LOCKWASHER (Grounded Warning Tag)	1

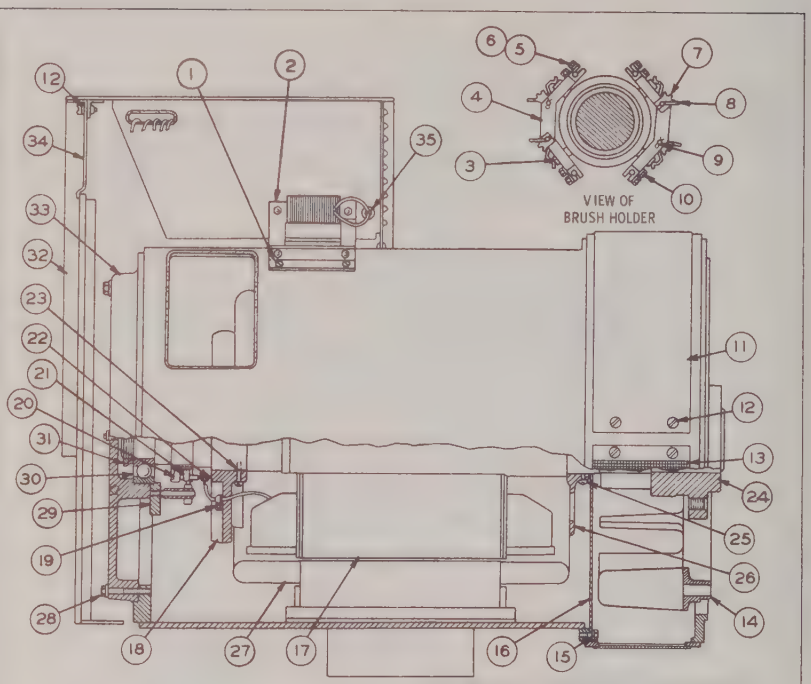
▲ NOT SHOWN

18	1B5174	PLUG	1
19	2B7409	PLUG	1
20	1S1573	BOLT	4
	3B4508	LOCKWASHER	4
21	1N9058	COVER ASSEM.	1
22	1L1143	BOLT	2
	9F5644	LOCKWASHER	2
23	1N5364	BRACKET	1
24	1S1617	BOLT	6
	1H7186	LOCKWASHER	6
25	1N9063	BRACKET	2
26	4B4274	WASHER	4
27	8L9823	GUIDE	2
28	1S1614	BOLT	6
29	8L5477	SHOCKMOUNT	3
▲	3N4693	WIRING DIAGRAM	1
C	6L6523	FILM (Instruction)	1
	2N5655	KIT (stator rewind)	1
	2L7405	KIT (rotor balance weight)	1

C INDICATES CHANGE

175826

8L34 GENERATOR—3 Phase—End View
Generator Serial No. 250TN3000—Up. 200 Volt, 60 hertz at 1200 R.P.M. 3N4701
Exciter & Regulator parts are shown on Pages 171L, 171M, 171M-1 & 171M-2

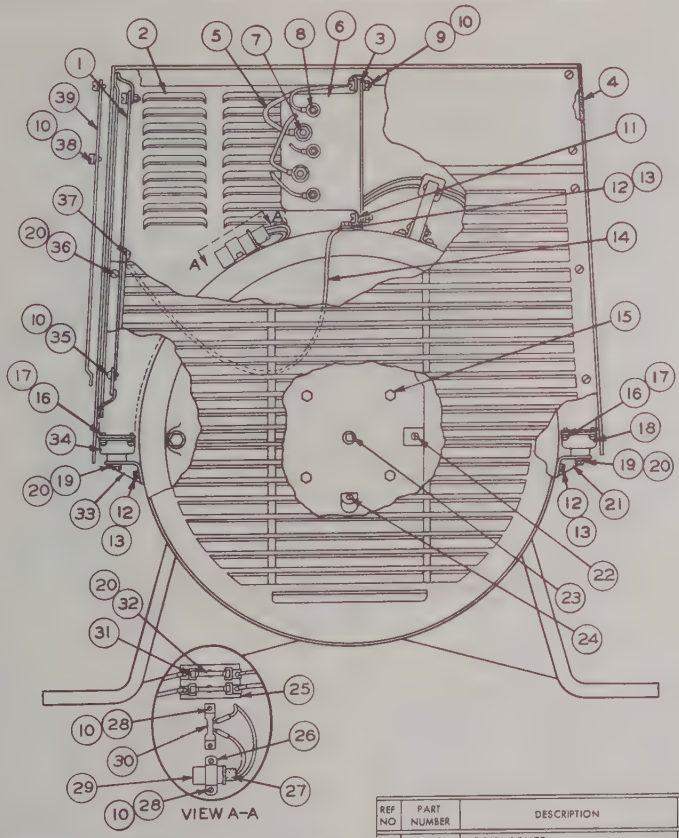


REF NO.	PART NUMBER	DESCRIPTION	QTY
1	9F9327	SCREW	4
	9F5599	LOCKWASHER	4
2	7L7394	DROOP TRANSFORMER ASSEM.	1
3	5L7191	BRUSH	4
	5L7189	HOLDER ASSEM. -----(Brush)----	2
		Each consisting of:	
4	5L7190	HOLDER	1
5	S-1614	BOLT	2
6	3B4504	LOCKWASHER	4
7	2L4853	ARM	2
8	2L2074	SPRING	2
	2L2076	PIN	2
9	3B4604	COTTER PIN	2
	2L2073	WASHER	4
10	S 1615	BOLT	2
11	7L7385	COVER	1
12	2D6249	SCREW	13
	7F9223	LOCKWASHER	21
13	7L7384	SCREEN	1
14	7L7386	FAN	1
15	S 1614	BOLT	8
16	7L7403	DEFLECTOR	1

REF NO	PART NUMBER	DESCRIPTION	QTY
17	8L6182	ROTOR ASSEM.	1
18	7L7380	FAN	1
	6L7008	CLAMP	2
19	3H3627	SCREW	2
	9B7233	LOCKWASHER	2
20	2L2123	RING ASSEM. -----(Outer)-----	1
21	2L2122	RING ASSEM. -----(Inner)-----	1
22	2L4845	NUT	4
		(2 in each 2L2123 & 2L2122 Ring Assem.)	
23	4B1259	SCREW	2
24	7L7382	HUB	1
25	4B1258	SCREW	2
26	7L7381	DISC	1
		(Parts of 8L6182 Rotor Assem.)	
27	8L6181	STATOR ASSEM.	1
	7L7377	CHANNEL	1
		(Part of 8L6181 Stator Assem.)	
28	1B4367	BOLT	6
	3B4510	LOCKWASHER	6
29	7L7454	RETAINER AND YOKE ASSEM.	1
	2L4849	TUBE----------(Long)----------	2
	2L5592	TUBE---------(Short)----------	2
		(Parts of 7L7454 Retainer & Yoke Assem.)	
30	4L6677	BEARING	1
31	5F7404	NUT	1
	5F7403	LOCK	1
32	7L7391	COVER ASSEM.	1
33	7L7383	BRACKET	1
34	7L7393	PANEL	1
35	8L3948	GROMMET	1
		The following Repair Kits are available:	
	7L7450	KIT--------(Stator Rewind)--------	1
	7L7405	KIT----(Rotor Balance Weight)-----	1

122324

7L63 GENERATOR—3 Phase—Side View
Effective with Generator Serial No. A250TH1
230-460 Volt, 60 Cycle at 1200 R.P.M. or 200-400 Volt, 50 Cycle at 1000 R.P.M.

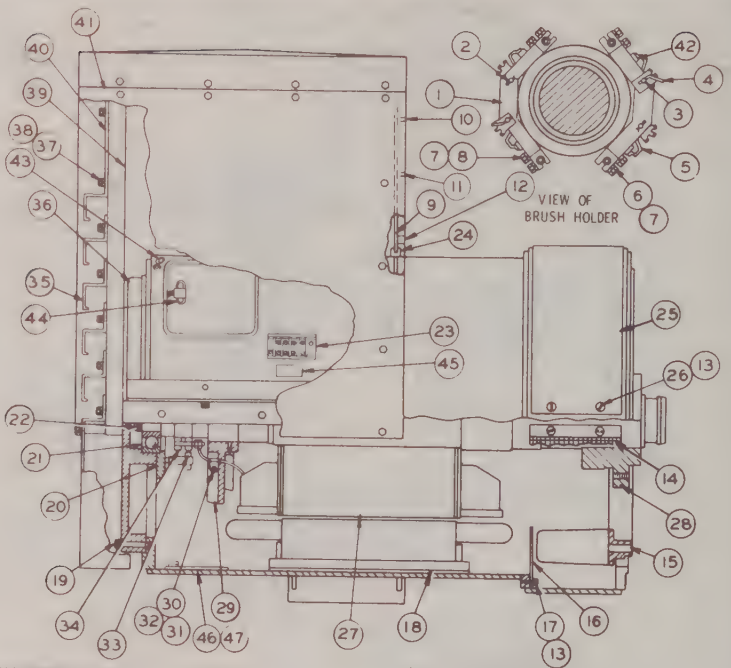


REF NO	PART NUMBER	DESCRIPTION	QTY
1	8L6180	EXCITER AND REGULATOR ASSEM. (See Separate Illustration)	1
	6L6421	LABEL---------(Warning)----------	1
2	7L7387	BOX ASSEM.----------	1
3	7L7388	CHANNEL----------	1
4	7L7389	GASKET SET----------	1
		(Parts of 7L7387 Box Assem.)	
5	7L7399	WIRING HARNESS----------	1
6	7L6827	NOISE SUPPRESSION ASSEM.----	1
7	1B4330	NUT----------	6
	3B4504	LOCKWASHER----------	6
8	1B2578	NUT----------	4
	3B4506	LOCKWASHER----------	4
		(Parts of 7L6827 Noise Suppression Assem.)	
9	6L7104	SCREW----------	8
10	9F5599	LOCKWASHER----------	24
11	7L4206	STRAP----------	1
12	2H3755	BOLT----------	7
13	1H7186	LOCKWASHER----------	7
14	7L7396	CABLE ASSEM.----------	1
15	S1573	BOLT----------	4
	3B4508	LOCKWASHER----------	4
16	4B1237	SCREW----------	24

REF NO	PART NUMBER	DESCRIPTION	QTY
17	8F1434	LOCKWASHER----------	24
18	7L893	SHOCKMOUNT-----(Right Hand)----	3
19	S1614	BOLT----------	6
20	7F9223	LOCKWASHER----------	16
21	6L9964	BRACKET ASSEM.----------	1
22	2B7408	PLUG----------	1
23	1B5174	PLUG----------	1
24	2B7409	PLUG----------	1
25	7L7398	BLOCK----------	1
26	7L7402	STRAP----------	1
27	7L7392	BOOT----------	1
28	2H8533	SCREW----------	4
29	7L7400	CAPACITOR----------	1
30	7L7397	RESISTOR ASSEM.----------	1
31	7L6745	FUSE----------	2
32	4B1258	SCREW----------	2
33	7L7378	BRACKET ASSEM.----------	1
34	7L227	SHOCKMOUNT-----(Left Hand)-----	3
35	9F9327	BOLT----------	4
36	2D6249	SCREW----------	8
37	4B1220	SCREW----------	1
	9B7233	LOCKWASHER----------	1
38	3K8190	SCREW----------	8
39	6L8311	COVER----------	1
	6L6523	LABEL---------(Instruction)--------	1
	7L6738	WIRING DIAGRAM----------	1

122325

7L63 GENERATOR—3 Phase—End View
Effective with Generator Serial No. A250TH1
230-460 Volt, 60 Cycle at 1200 R.P.M. or 200-400 Volt, 50 Cycle at 1000 R.P.M.
8L6180 Exciter and Regulator Assembly parts are shown on Page 171A

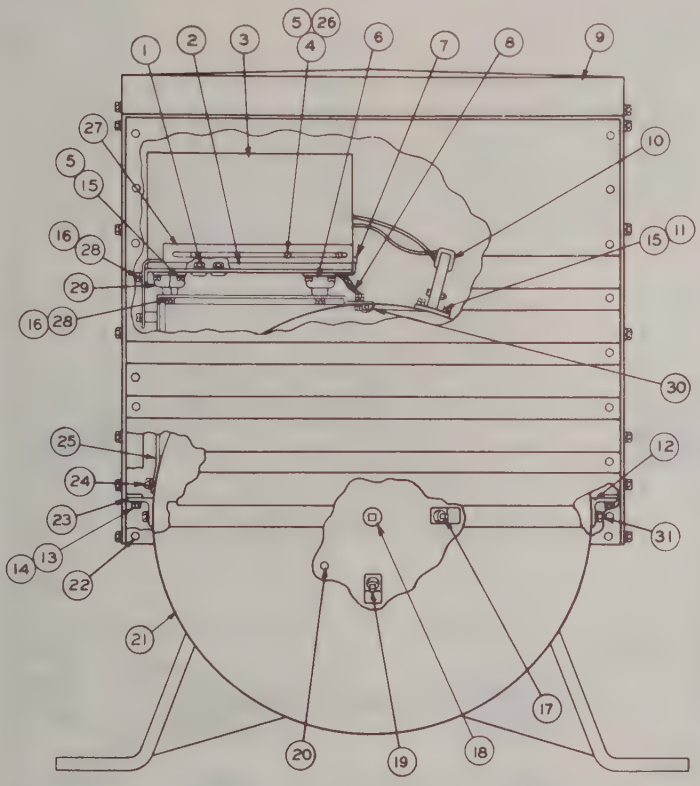


REF NO	PART NUMBER	DESCRIPTION	QTY
1	5L7189	HOLDER ASSEM.	2
	5L7190	HOLDER	1
2	3B4604	COTTER PIN	2
	2L2073	WASHER	4
3	2L2076	PIN	2
4	2L4853	ARM	2
5	2L2074	SPRING	2
6	S1614	BOLT	2
7	3B4504	LOCKWASHER	4
8	S1615	BOLT	2
9	5N3166	PANEL ASSEM. (front)	1
10	5N3175	PLUG	1
11	5N3174	PLUG	6
12	4F8711	PLUG	1
13	7F9223	LOCKWASHER	16
14	7L7384	SCREEN	1
15	7L7386	FAN	1
16	7L7403	DEFLECTOR	1
17	2A762	BOLT	8
18	5N3004	STATOR ASSEM.	1
	7L7377	CHANNEL	1
19	1B4367	BOLT	6
	3B4510	LOCKWASHER	6
20	7L7454	RETAINER & YOKE ASSEM.	1
	2L4849	TUBE (long)	2
	2L5592	TUBE (short)	2
21	4L6677	BEARING	1
22	1N8620	RING	1
23	6L7575	TERMINAL	1
	3N8763	STRIP	1
C	2N3476	SCREW	2
	3L8187	LOCKWASHER	2
24	1N9053	CHANNEL	1
25	7L7385	COVER	1
26	310243	SCREW	8
27	3N6291	ROTOR ASSEM.	1
28	7L7382	HUB	1
29	2N7751	FAN ASSEM.	1
	2N7736	SCREW	1
30	6L7008	STRAP (cable)	2
31	3H3627	SCREW	2
32	9B7233	LOCKWASHER	2
33	2L2122	RING ASSEM. (inner)	1
	2L4845	NUT	2
	2L2123	RING ASSEM. (outer)	1
34	2L4844	TUBE	1
	2L4845	NUT	2
35	1N9060	LOUVER	4
36	7L7383	BRACKET	1
37	S509	BOLT	60
38	9F5644	LOCKWASHER	60
39	1N9055	FRAME ASSEM. (R. H.)	1
	1N9054	FRAME ASSEM. (L. H.)	1
40	1N9061	PANEL (meter)	1
41	1N9059	PANEL (side)	2
42	5L7191	BRUSH	4
C	6L7008	STRAP (cable)	2
43	5M5845	SCREW	1
44	8L8413	STRAP (cable)	4
45	3N8764	LABEL (connection)	1
46	5N3005	HEATER ASSEM. (short lead)	1
	5N3006	HEATER ASSEM. (long lead)	1
	5N2536	CLAMP	6
47	7S4346	SCREW	6
	8F1434	LOCKWASHER	6
C	FM055243	FORM	1

(Instructions for Installing Fan Assem.)

C INDICATES CHANGE 214166

8L93 GENERATOR—3 Phase—Side View
Generator Serial No. M57TH3200—Up. 200-400 Volt, 50 hertz at 1000 R.P.M. or 230-460 Volt, 60 hertz at 1200 R.P.M.



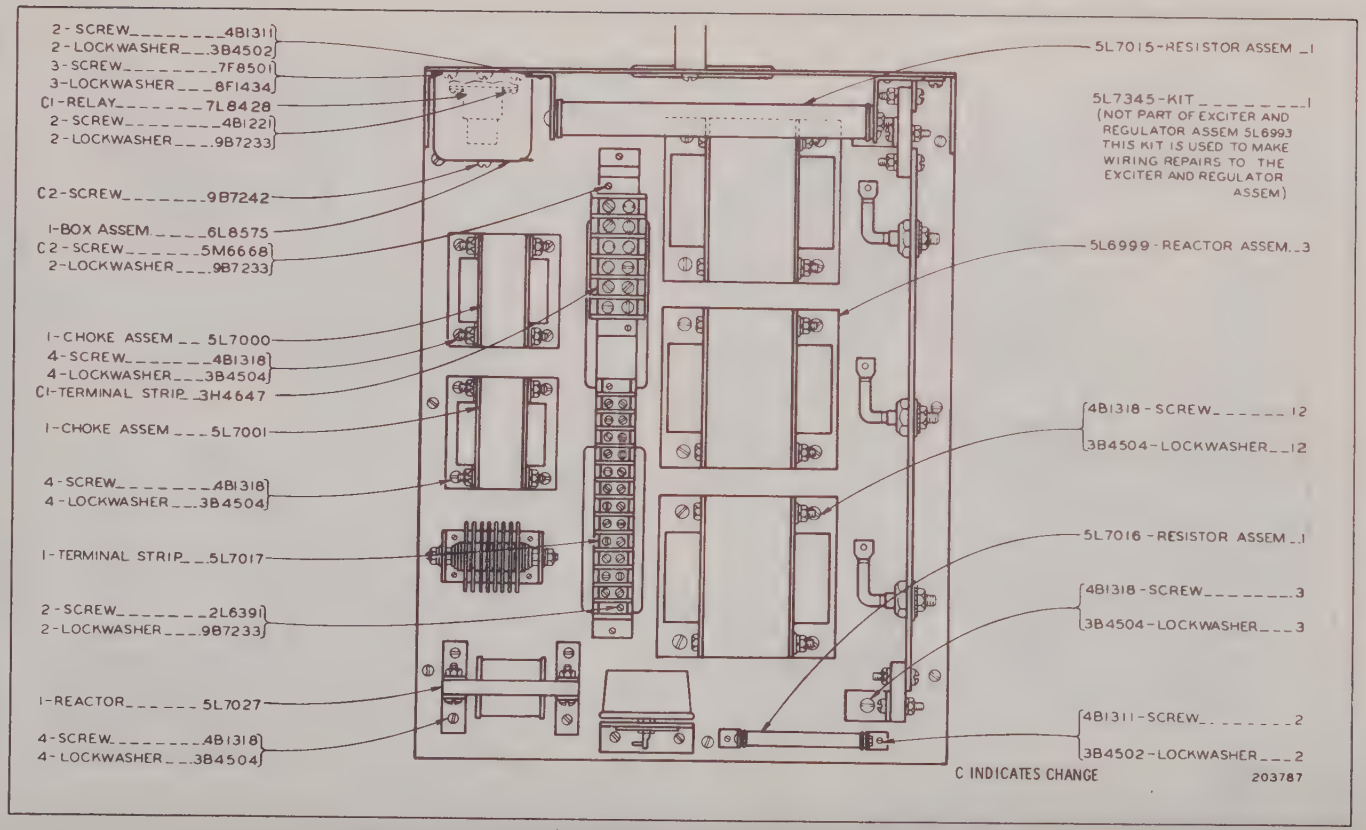
REF NO	PART NUMBER	DESCRIPTION	QTY
1	8F5758	SCREW	4
	1H3244	LOCKWASHER	4
2	8L9821	SUPPORT ASSEM.	1
3	3N4692	EXCITER & REGULATOR ASSEM. (Separate Illustration)	1
4	9F9327	SCREW	4
5	8F1434	LOCKWASHER	20
6	8L5477	SHOCKMOUNT	3
7	8L8602	CHANNEL	1
8	8L5476	STRAP	1
9	1N9056	COVER	1
10	7L7394	DROOP TRANSFORMER ASSEM.	1
11	9F5599	LOCKWASHER	4
12	1N5383	BRACKET	1
13	S509	BOLT	8
14	8F3590	LOCKWASHER	8
15	7S4346	SCREW	20
16	7F9223	LOCKWASHER	6
17	2B7408	PLUG	1
18	1B5174	PLUG	1
19	2B7409	PLUG	1
20	S1573	BOLT	4
	3B4508	LOCKWASHER	4
21	1N9058	COVER ASSEM.	1

	REF NO	PART NUMBER	DESCRIPTION	QTY
	22	L1143	BOLT	2
		9F5644	LOCKWASHER	2
	23	1N5364	BRACKET	1
	24	S1617	BOLT	6
		1H7186	LOCKWASHER	6
	25	1N9063	BRACKET	2
	26	4B4274	WASHER	4
	27	8L9823	GUIDE	2
	28	S1614	BOLT	6
	29	7L893	SHOCKMOUNT	1
C		6L7008	STRAP (cable)	2
C	30	4B1240	SCREW	2
C		4N1250	NUT	2
	31	319831	SCREW	6
		3N9813	WIRING DIAGRAM	1
		6L6523	FILM (instruction)	1
		2N5651	KIT (stator rewind)	1
		7L7405	KIT (rotor balance weight)	1

C INDICATES CHANGE 214168

8L93 GENERATOR—3 Phase—End View

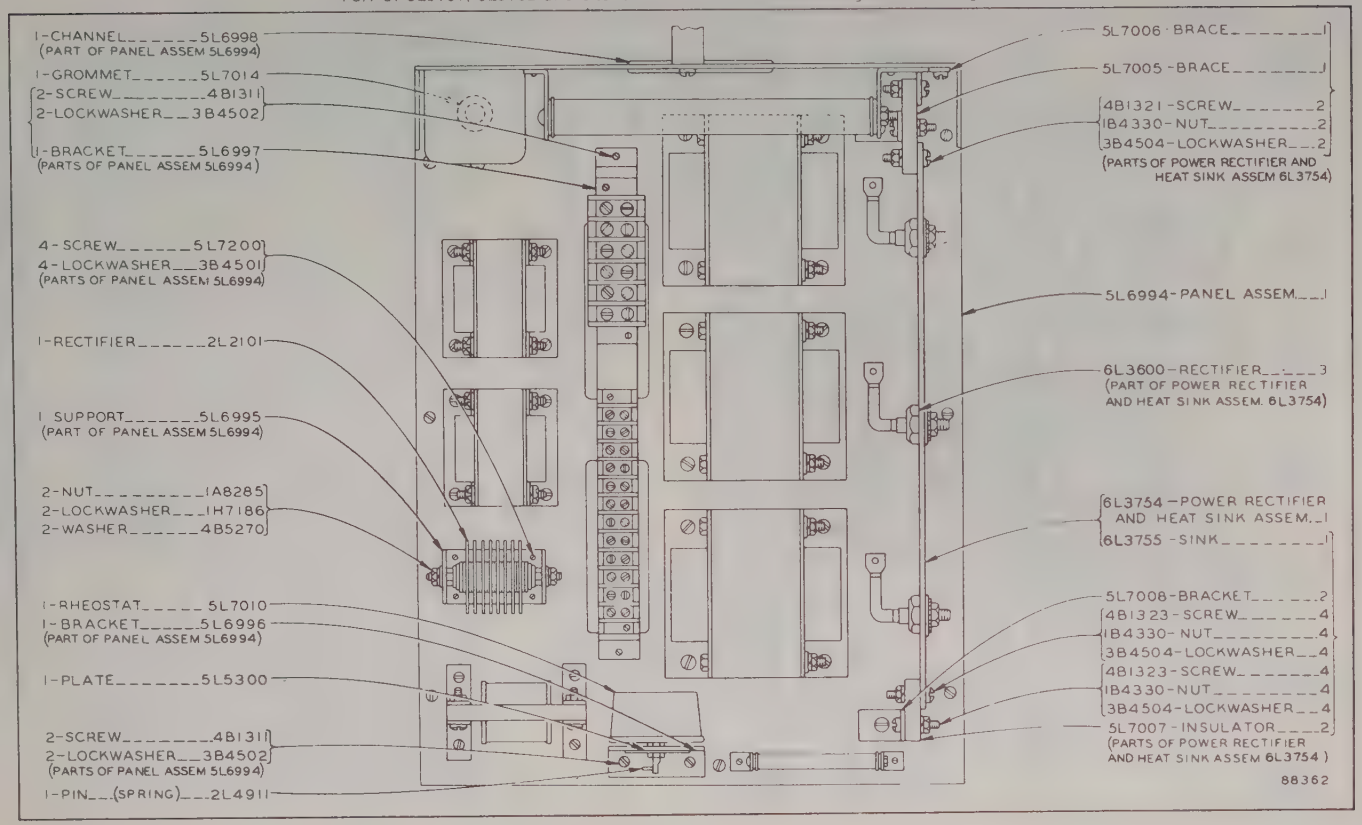
Generator Serial No. M57TH3200—Up. 200-400 Volt, 50 hertz at 1000 R.P.M. or 230-460 Volt, 60 hertz at 1200 R.P.M. 3N4692 Exciter and Regulator parts are shown on Pages 171F-5 through 171F-8

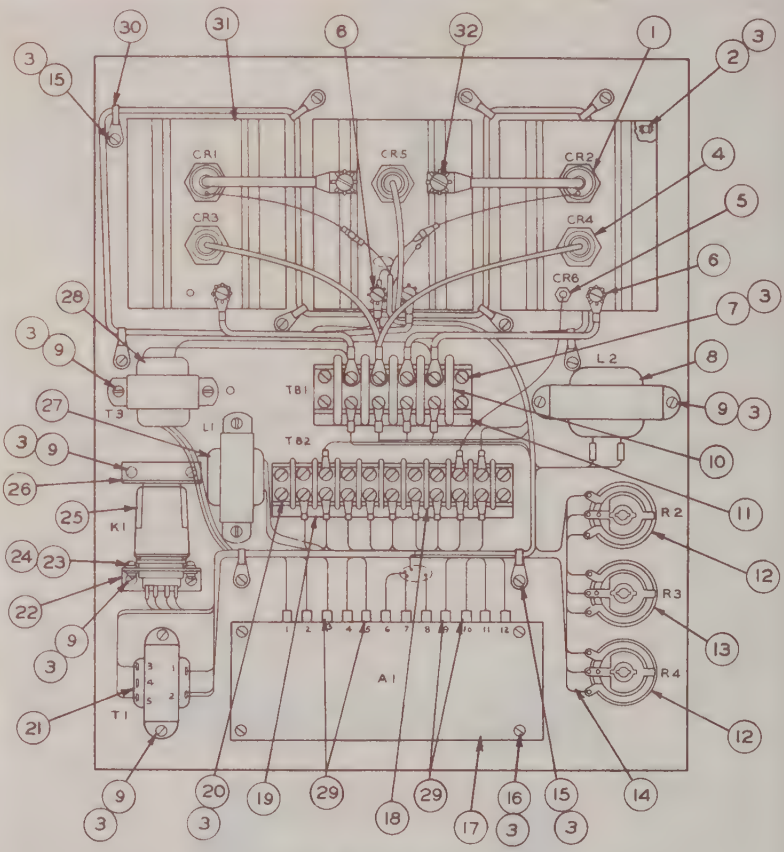


5L6993 STATIC EXCITER AND REGULATOR ASSEMBLY—Top View—Part One
Effective with Generator Serial No. 250SS15—Up, 250SH146—Up, and 250SN8—Up
Part of 5L3901, 5L3902 and 5L3903 Generators shown on Pages 164 through 169

5L6993 STATIC EXCITER AND REGULATOR ASSEMBLY—Top View—Part Two

Effective with Generator Serial No. 250SS15—Up, 250SH146—Up, and 250SN8—Up
Part of 5L3901, 5L3902 and 5L3903 Generators shown on Pages 164 through 169



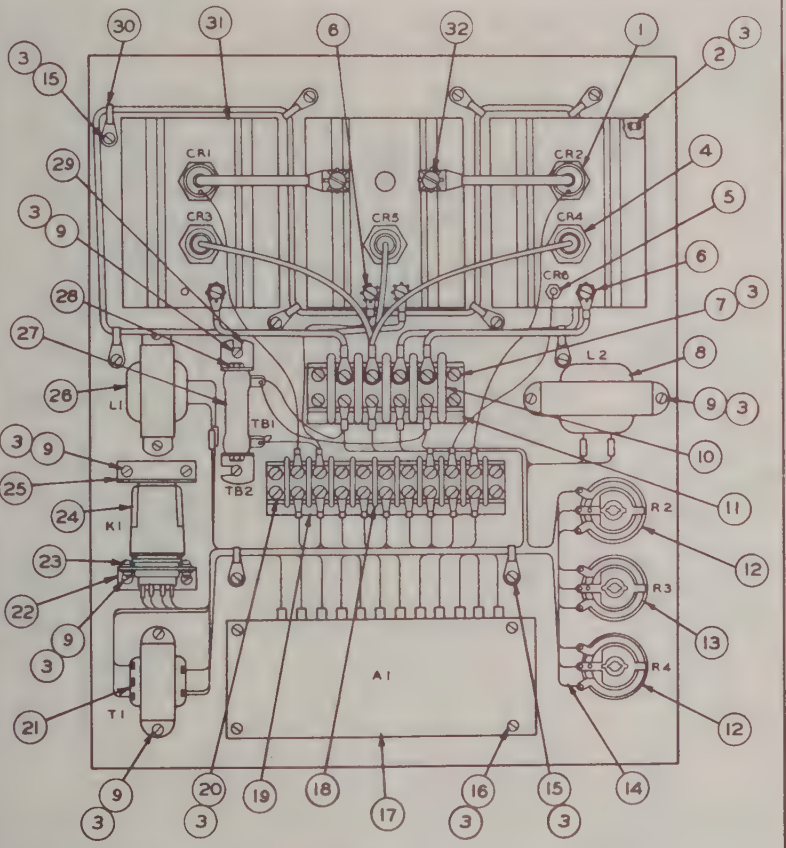


REF. NO.	PART NUMBER	DESCRIPTION	QTY
1	6L9660	RECTIFIER	2
2	6L7077	SCREW	12
	7L336	NUT	12
3	9B7233	LOCKWASHER	46
4	6L3590	RECTIFIER	3
5	7L8032	RECTIFIER	1
6	4B1237	SCREW	4
	8F1434	LOCKWASHER	4
7	5M6668	SCREW	4
8	6L6622	REACTOR	1
9	4B1220	SCREW	12
10	6L7575	TERMINAL STRIP	1
11	7L332	STRIP	1
12	6L7003	POTENTIOMETER------(Level)------	2
13	6L8401	POTENTIOMETER------(Droop)-----	1
14	8L5135	HARNESS	1
15	4B1221	SCREW	10
16	8M8626	SCREW	4

REF NO.	PART NUMBER	DESCRIPTION	QTY
17	8L4276	REGULATOR ASSEM.	1
18	2F2832	TERMINAL STRIP	1
19	7L330	STRIP	1
20	3H3627	SCREW	4
21	6L6623	TRANSFORMER	1
22	8L5055	BRACKET	1
23	2F7306	SCREW	2
24	3L8187	LOCKWASHER	2
25	7L2767	RELAY	1
26	7L331	BRACKET	1
27	7L7812	CHOKE	1
28	8L4269	TRANSFORMER	1
29	8L5040	TERMINAL	4
30	6L7008	CLAMP	8
31	7L335	HEAT SINK	3
32	1S7443	SCREW	2
	6L7161	NUT	2
	7F9223	LOCKWASHER	2

122326

8L6180 EXCITER AND REGULATOR ASSEMBLY
Part of 7L63 Generator shown on Page 169K

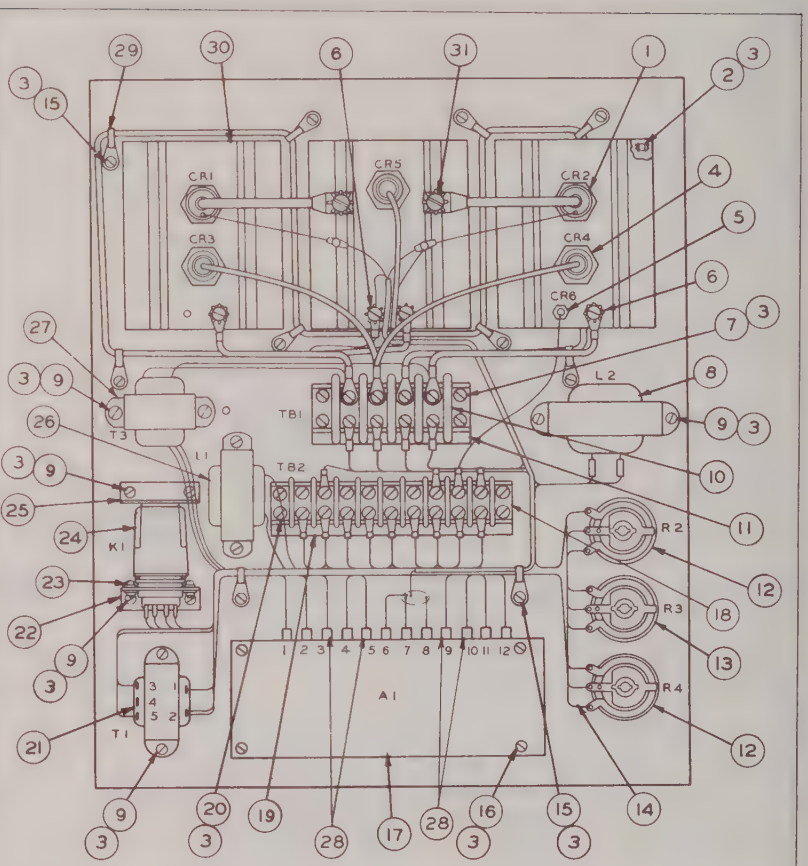


REF NO	PART NUMBER	DESCRIPTION	QTY
1	6L9660	RECTIFIER	2
2	6L7077	SCREW	12
	7L336	NUT	12
3	9B7233	LOCKWASHER	46
4	6L3590	RECTIFIER	3
5	7L8032	RECTIFIER	1
6	4B1237	SCREW	4
	8F1434	LOCKWASHER	4
7	5M6668	SCREW	4
8	6L6622	REACTOR	1
9	4B1220	SCREW	12
10	6L7575	TERMINAL STRIP	1
11	7L332	STRIP	1
12	6L7003	POTENTIOMETER-----(Level)-----	2
13	6L8401	POTENTIOMETER-----(Droop)-----	1
14	7L334	HARNESS	1
15	4B1221	SCREW	10
16	8M8626	SCREW	4
17	7L2492	REGULATOR ASSEM.	1

REF NO	PART NUMBER	DESCRIPTION	QTY
18	2F2832	TERMINAL STRIP	1
19	7L330	STRIP	1
20	3H3627	SCREW	4
21	6L6623	TRANSFORMER	1
22	6L7083	BRACKET	1
23	2F7306	SCREW	2
	3L8187	LOCKWASHER	2
24	7L2767	RELAY	1
25	7L331	BRACKET	1
26	6L6624	CHOKE	1
27	7L333	RESISTOR	2
28	7L380	BOLT ASSEM.	2
29	7L381	BRACKET	1
30	6L7008	CLAMP	8
31	7L335	HEAT SINK	3
32	1S7443	SCREW	2
	6L7161	NUT	2
	7F9223	LOCKWASHER	2

98797

7L7395 EXCITER AND REGULATOR ASSEMBLY—Type 1
Part of Generators shown on Pages 169B, 169B-2, 169D and 169F



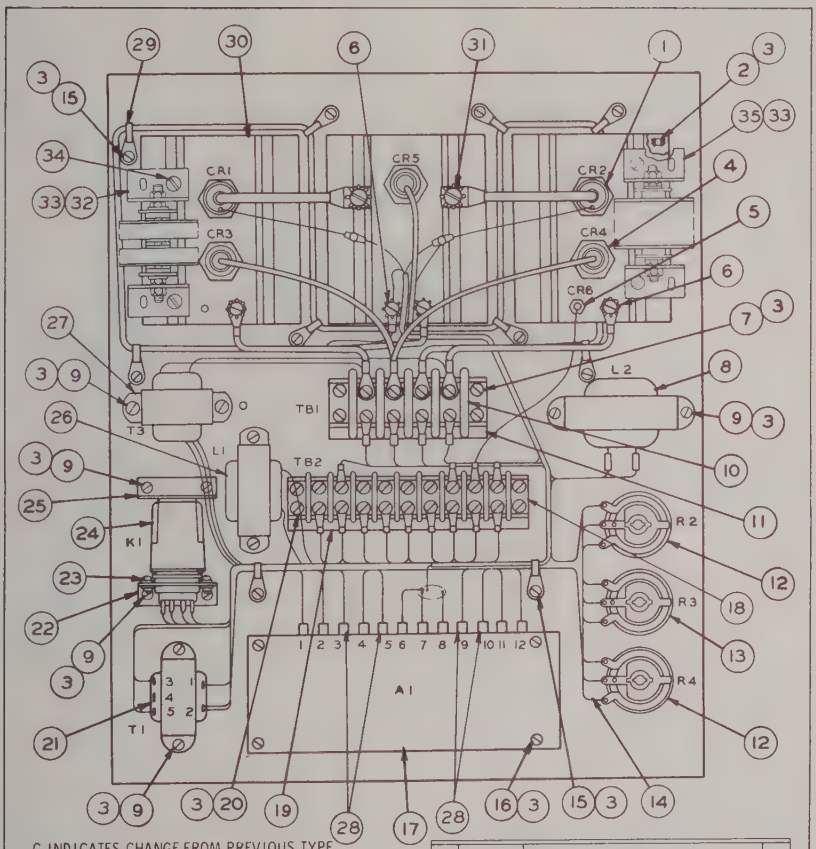
REF NO	PART NUMBER	DESCRIPTION	QTY
1	6L9660	RECTIFIER	2
2	6L7077	SCREW	12
	7L336	NUT	12
3	9B7233	LOCKWASHER	46
4	6L3590	RECTIFIER	3
5	7L8032	RECTIFIER	1
6	4B1237	SCREW	4
	8F1434	LOCKWASHER	4
7	5M6668	SCREW	4
8	6L6622	REACTOR	1
9	4B1220	SCREW	12
10	6L7575	TERMINAL STRIP	1
11	7L332	STRIP	1
12	6L7003	POTENTIOMETER------(Level)------	2
13	6L8401	POTENTIOMETER------(Droop)------	1
C 14	8L5135	HARNESS	1
15	4B1221	SCREW	10
16	8M8626	SCREW	4
C 17	8L4276	REGULATOR ASSEM.	1

C INDICATES CHANGE FROM PREVIOUS TYPE

REF. NO.	PART NUMBER	DESCRIPTION	QTY
18	2F2832	TERMINAL STRIP	1
19	7L330	STRIP	1
20	3H3627	SCREW	4
21	6L6623	TRANSFORMER	1
C 22	8L5055	BRACKET	1
23	2F7306	SCREW	2
	3L8187	LOCKWASHER	2
24	7L2767	RELAY	1
25	7L331	BRACKET	1
C 26	7L7812	CHOKE	1
C 27	8L4269	TRANSFORMER	1
C 28	8L5040	TERMINAL	4
29	6L7008	CLAMP	8
30	7L335	HEAT SINK	3
31	1S7443	SCREW	2
	6L7161	NUT	2
	7F9223	LOCKWASHER	2

124821

7L7395 EXCITER AND REGULATOR ASSEMBLY—Type 2
Part of 7L30 & 7L31 Generators shown on Pages 169B, 169B-2, 169D & 169F



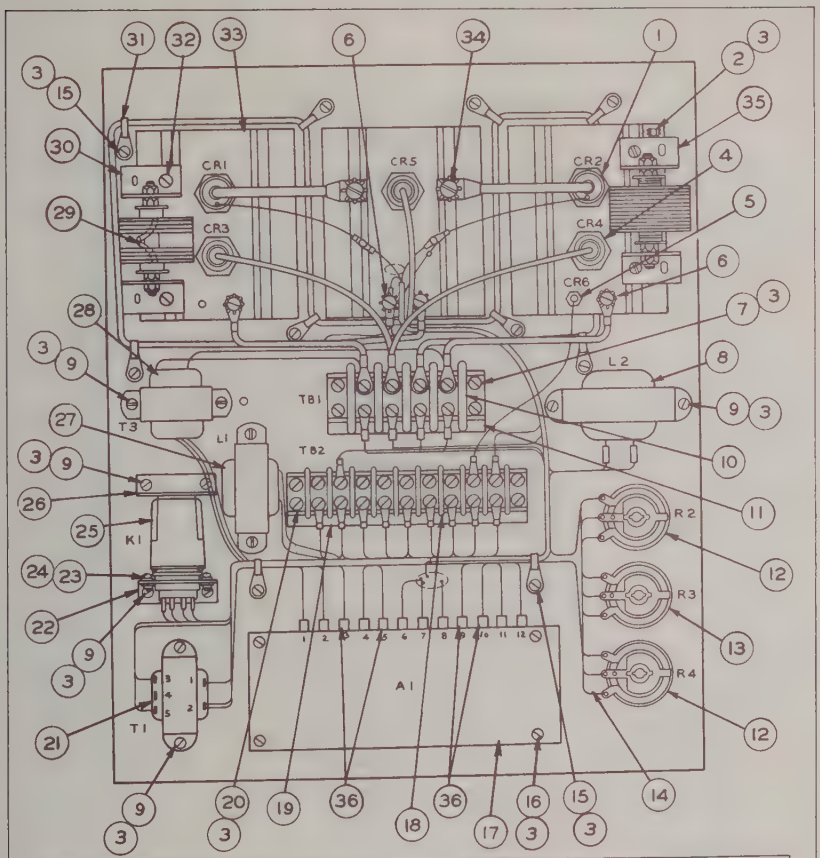
C INDICATES CHANGE FROM PREVIOUS TYPE

REF. NO.	PART NUMBER	DESCRIPTION	QTY
1	6L9660	RECTIFIER	2
2	6L7077	SCREW	12
	7L336	NUT	12
3	9B7233	LOCKWASHER	46
4	6L3590	RECTIFIER	3
5	7L8032	RECTIFIER	1
6	4B1237	SCREW	4
	8F1434	LOCKWASHER	4
7	5M6668	SCREW	4
8	6L6622	REACTOR	1
9	4B1220	SCREW	12
10	6L7575	TERMINAL STRIP	1
11	7L332	STRIP	1
12	6L7003	POTENTIOMETER------(Level)------	2
13	6L8401	POTENTIOMETER------(Droop)------	1
14	8L5135	HARNESS	1
15	4B1221	SCREW	10
16	8M8626	SCREW	4
17	8L4276	REGULATOR ASSEM.	1
18	2F2832	TERMINAL STRIP	1
19	7L330	STRIP	1

REF. NO.	PART NUMBER	DESCRIPTION	QTY
20	3H3627	SCREW	4
21	6L6623	TRANSFORMER	1
22	8L5055	BRACKET	1
23	2F7306	SCREW	2
	3L8187	LOCKWASHER	2
24	7L2767	RELAY	1
25	7L331	BRACKET	1
26	7L7812	CHOKE	1
27	8L4269	TRANSFORMER	1
28	8L5040	TERMINAL	4
29	6L7008	CLAMP	8
30	7L335	HEAT SINK	3
31	1S7443	SCREW	2
	6L7161	NUT	2
	7F9223	LOCKWASHER	2
C 32	8L4873	VOLTAGE SUPPRESSOR	1
C 33	8L9604	LEAD ASSEM. (Includes 5 Leads)	1
	7S1201	SCREW	4
C 34	4B2043	NUT	4
	9F5599	LOCKWASHER	4
C 35	8L4863	VOLTAGE ASSEM.	1

124822

7L7395 EXCITER AND REGULATOR ASSEMBLY—Type 3
Part of 7L30 & 7L31 Generators shown on Pages 169B, 169B-2, 169D & 169F

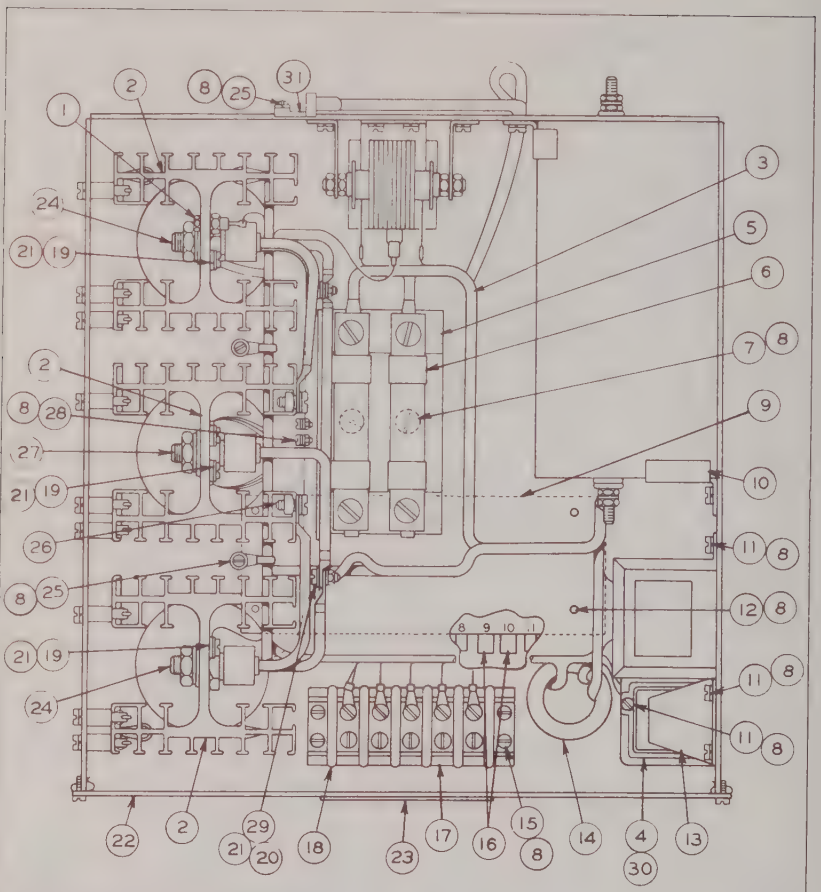


REF. NO.	PART NUMBER	DESCRIPTION	QTY
1	6L9660	RECTIFIER	2
2	6L7077	SCREW	12
	7L336	NUT	12
3	9B7233	LOCKWASHER	46
4	6L3590	RECTIFIER	3
5	7L8032	RECTIFIER	1
6	4B1237	SCREW	4
	8F1434	LOCKWASHER	4
7	5M6668	SCREW	4
8	6L6622	REACTOR	1
9	4B1220	SCREW	12
10	6L7575	TERMINAL STRIP	1
11	7L332	STRIP	1
12	6L7003	POTENTIOMETER-----(Level)-----	2
13	6L7004	POTENTIOMETER-----(Droop)-----	1
14	8L5135	HARNESS	1
15	4B1221	SCREW	10
16	8M8626	SCREW	4
17	8L5460	REGULATOR ASSEM.	1
18	^F2832	TERMINAL STRIP	1
19	7L330	STRIP	1

REF. NO.	PART NUMBER	DESCRIPTION	QTY
20	3H3627	SCREW	4
21	6L6623	TRANSFORMER	1
22	8L5055	BRACKET	1
23	2F7306	SCREW	2
24	3L8187	LOCKWASHER	2
25	7L2767	RELAY	1
26	7L331	BRACKET	1
27	7L7812	CHOKE	1
28	8L4269	TRANSFORMER	1
29	8L9604	LEAD ASSEM.	1
30	8L4873	VOLTAGE SUPPRESSOR--(Phase)--	1
31	6L7008	CLAMP	8
32	7S1201	SCREW	4
	4B2043	NUT	4
	9F5599	LOCKWASHER	4
33	7L335	HEAT SINK	3
34	1S7443	SCREW	2
	6L7161	NUT	2
	7F9223	LOCKWASHER	2
35	8L4863	VOLTAGE SUPPRESSOR--(Field)---	1
36	8L5040	TERMINAL	4

123630

8L9600 EXCITER AND REGULATOR ASSEMBLY
Part of 7L32 Generator shown on Page 169H

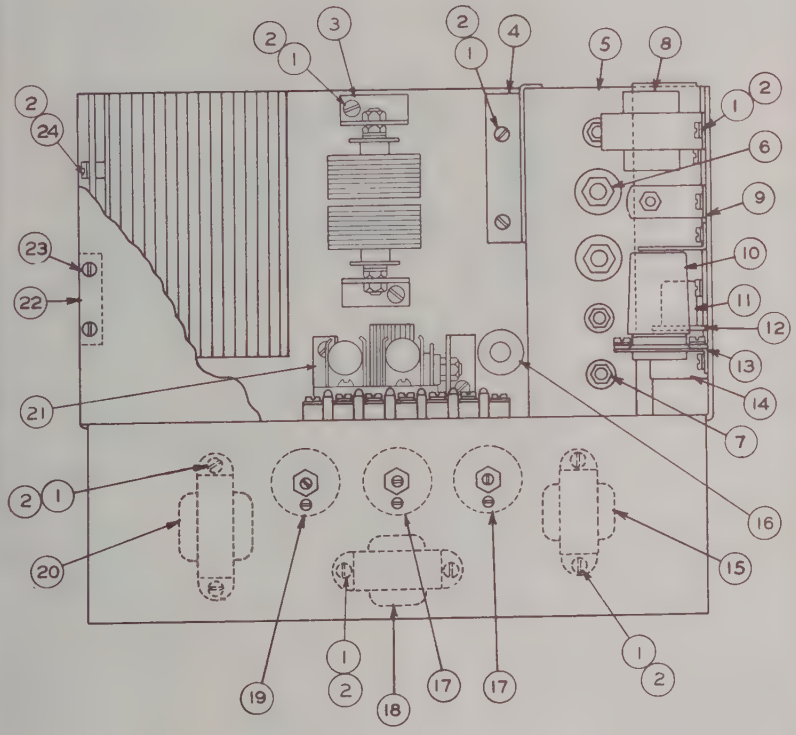


REF. NO.	PART NUMBER	DESCRIPTION	QTY
1	7L8032	RECTIFIER	1
2	7L335	HEAT SINK	3
3	1N5569	WIRING HARNESS	1
4	8L5826	SOCKET ASSEM. (Part of 1N5569 Wiring Harness)	1
5	7L7398	BLOCK	1
6	7L6745	FUSE	2
7	3D9799	MACHINE SCREW	2
8	9B7233	LOCKWASHER----(Shakeproof)	22
9	8L4276	REGULATOR ASSEM.	1
10	8L5829	BRACKET	1
11	4B1220	MACHINE SCREW	6
12	8M8626	MACHINE SCREW	4
13	7L331	BRACKET	1
14	8L5478	GROMMET	1
15	5M6668	MACHINE SCREW	4
16	8L5040	TERMINAL	2
17	1N7253	STRIP	1

REF. NO.	PART NUMBER	DESCRIPTION	QTY
18	2L1717	TERMINAL STRIP	1
19	4B1237	MACHINE SCREW	4
20	8L5832	NUT	1
21	8F1434	LOCKWASHER	5
22	1N5036	GUARD ASSEM.	1
23	6L6421	WARNING LABEL (Part of 1N5036 Guard Assem.)	1
24	6L9660	RECTIFIER	2
25	4B1221	MACHINE SCREW	4
26	1S7443	MACHINE SCREW	2
	6L7161	NUT	2
	7F9223	LOCKWASHER	2
27	6L3590	RECTIFIER	3
28	7S1201	MACHINE SCREW	2
	4B2043	NUT	2
29	1H4336	MACHINE SCREW	1
30	7L2770	RECTIFIER	1
31	6L7008	CLAMP	2

124316

1N9062 EXCITER AND REGULATOR ASSEMBLY—Part 1
Part of 7L90 & 7L91 Generators shown on Pages 169B-4 & 169F-2

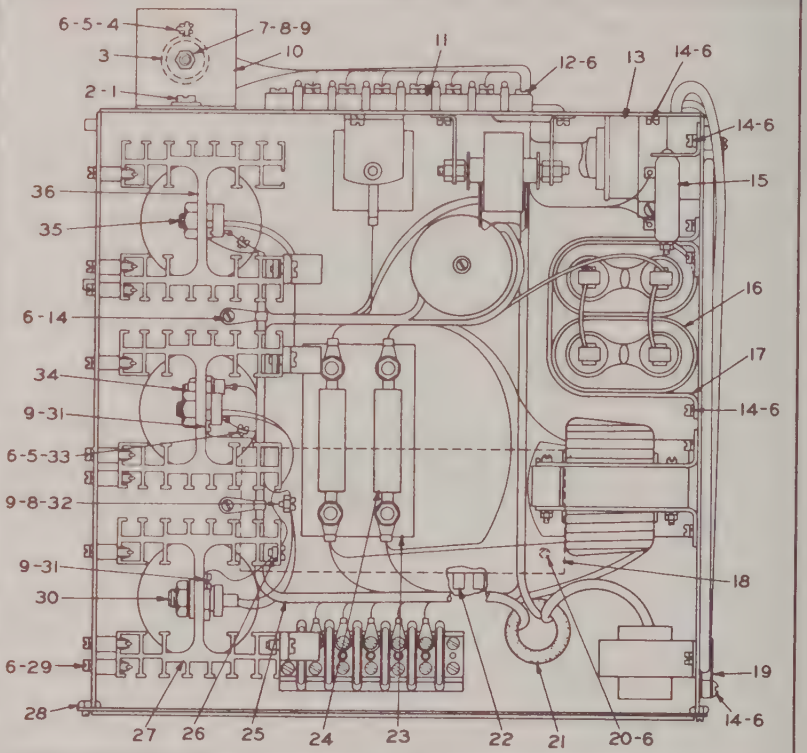


REF. NO.	PART NUMBER	DESCRIPTION	QTY
1	4B1220	MACHINE SCREW	22
2	9B7233	LOCKWASHER----(Shakeproof)	34
3	8L4873	VOLTAGE SUPPRESSOR	1
4	8L5830	BRACKET	1
5	1N5567	NOISE SUPPRESSION ASSEM.	1
6	1D4717	NUT	4
	3B4506	LOCKWASHER	4
7	1B4330	NUT	6
	3B4504	LOCKWASHER	6
	(Part of 1N5567 Noise Suppression Assem.)		
8	6L6622	REACTOR	1
9	1N9308	RESISTOR ASSEM.	1
10	8L5823	RELAY	1
11	7L7392	BOOT	1

REF. NO.	PART NUMBER	DESCRIPTION	QTY
12	7L7400	CAPACITOR	1
13	8L5824	BRACKET	1
14	7L7402	STRAP	1
15	6L6623	TRANSFORMER-----(Isolation)	1
16	1N9147	GROMMET	1
17	6L7003	POTENTIOMETER-----(Level)	2
18	8L4269	TRANSFORMER--(Regulator Power)	1
19	6L8401	POTENTIOMETER-----(Droop)	1
20	7L7812	CHOKE	1
21	8L4863	VOLTAGE SUPPRESSOR	1
22	8L5853	CLIP	2
23	5S7348	SCREW	4
	3L8187	LOCKWASHER	4
24	8L5828	SCREW	12
	8L5827	NUT----------(Expansion)	12

124317

1N9062 EXCITER AND REGULATOR ASSEMBLY—Part 2
Part of 7L90 & 7L91 Generators shown on Pages 169B-4 & 169F-2

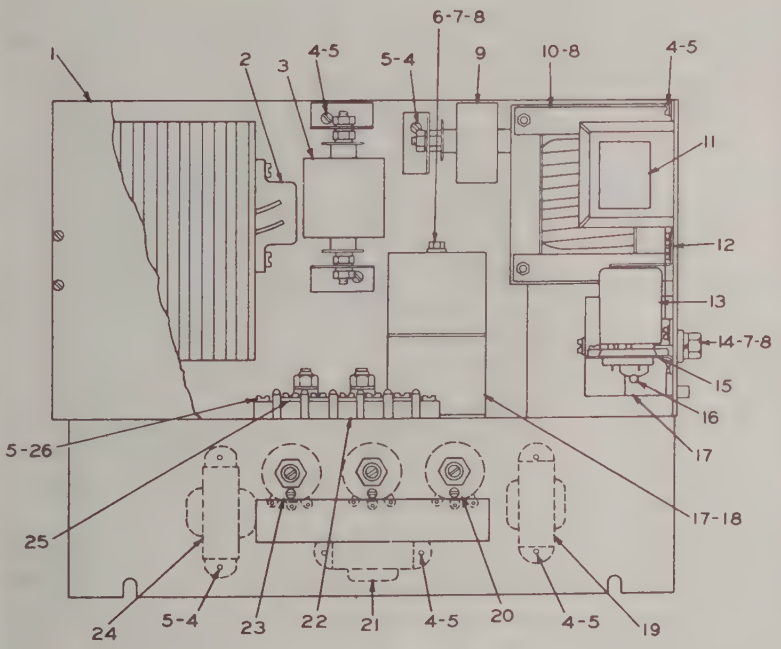


REF. NO.	PART NUMBER	DESCRIPTION	QTY
1	4B1220	SCREW	2
2	4B4863	WASHER	2
3	2N4698	RESISTOR	1
	2N4721	WASHER--------(Plain)----------	2
	2N4699	WASHER	2
4	7S1197	SCREW	2
5	4B2043	NUT	4
6	9B7233	LOCKWASHER	42
7	2N4722	BOLT	1
8	8L5832	NUT	2
9	8F1434	LOCKWASHER	5
10	2N4700	BRACKET	1
11	2N4765	TERMINAL STRIP	1
	2N4766	STRIP---------(Marker)----------	1
12	3D9799	SCREW	6
13	2N4692	STRAP	1
	7L7400	CAPACITOR	4
14	4B1221	SCREW	10
15	2N5764	RESISTOR ASSEM.	1
16	2N4693	CAPACITOR	2
17	2N4694	BRACKET	1
18	8L4276	REGULATOR ASSEM.	1
19	6L7008	CLAMP	4
20	8M8626	SCREW	4
21	8L5478	GROMMET	3
22	8L5040	TERMINAL	2

REF. NO	PART NUMBER	DESCRIPTION	QTY
23	8L4092	BLOCK	1
24	7L6750	FUSE	2
25	2N4688	WIRING HARNESS	1
	8L5826	SOCKET ASSEM.	1
		(Part of 2N4688 Assem.)	
	7L3178	WIRE	1
		(Part of 8L5826 Assem.)	
	1S7443	SCREW	1
26	6L7161	NUT	1
	7F9223	LOCKWASHER	1
27	2N4689	HEAT SINK--------(Field)----------	1
	5S7348	SCREW	4
28	8L5853	NUT	2
	3L8187	LOCKWASHER	4
29	8L5828	SCREW	20
	8L5827	NUT	20
30	6L3590	RECTIFIER--------(Field)----------	1
31	4B1237	SCREW	3
32	1H4336	SCREW	1
33	7S1201	SCREW	2
34	7L8032	RECTIFIER--------(Build-Up)--------	1
35	6L9660	RECTIFIER-------(Controlled)--------	2
	6L3600	RECTIFIER--------(Power)---------	2
36	2N4691	HEAT SINK-------(Controlled)--------	2
	2N4690	HEAT SINK--------(Power)---------	2

127909

1N8507 EXCITER AND REGULATOR ASSEMBLY—Part 1
Part of 8L32 & 8L33 Generators shown on Pages 169B-6, 169B-8, 169F-4 and 169F-6

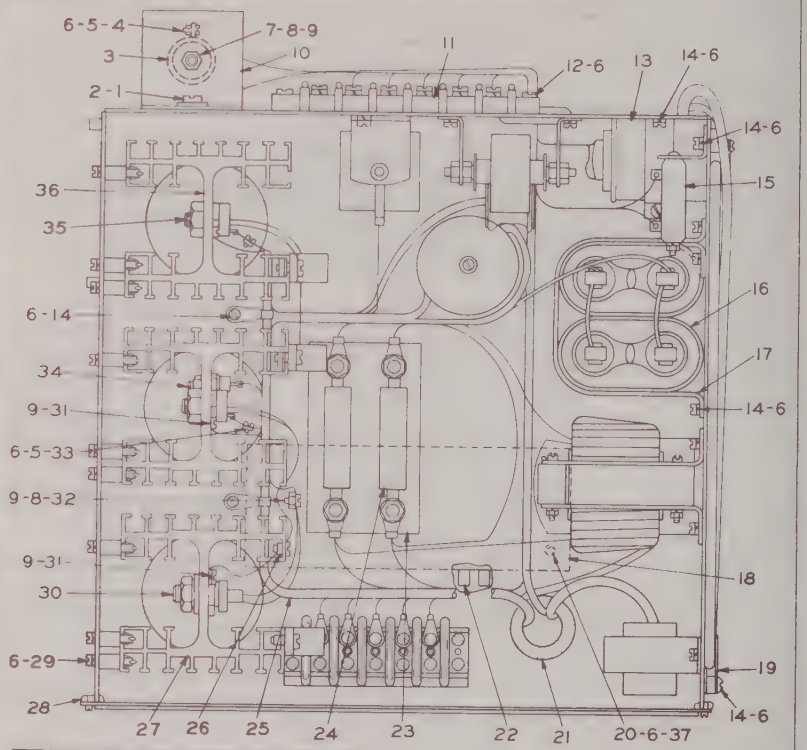


REF. NO.	PART NUMBER	DESCRIPTION	QTY
1	1N5036	GUARD ASSEM.	1
	6L6421	LABEL---------(Warning)-------- (Part of 1N5036 Assem.)	1
2	7L4062	SUPPRESSOR ASSEM.	3
3	8L4873	VOLTAGE SUPPRESSOR	1
4	4B1220	SCREW	20
5	9B7233	LOCKWASHER	24
6	2N4720	BOLT	1
7	8L5832	NUT	2
	4B4274	WASHER	2
8	8F1434	LOCKWASHER	6
9	8L4863	VOLTAGE SUPPRESSOR	1
10	2N4695	REACTOR ASSEM.	1
	9F9327	SCREW	4
11	6L6622	REACTOR	1

REF. NO.	PART NUMBER	DESCRIPTION	QTY
12	7L331	BRACKET	1
13	8L5823	RELAY	1
14	3L8199	SCREW	1
15	8L5824	BRACKET	1
16	7L2770	RECTIFIER	1
17	2N4696	REACTOR ASSEM.	3
18	2N4697	SPACER	3
19	6L6623	TRANSFORMER	1
20	6L7003	POTENTIOMETER	2
21	8L4269	TRANSFORMER	1
22	2L1717	TERMINAL STRIP	1
23	6L8401	POTENTIOMETER	1
24	7L7812	CHOKE	1
25	1N7253	STRIP----------(Marker)--------	1
26	5M6668	SCREW	4

127910

1N8507 EXCITER AND REGULATOR ASSEMBLY—Part 2—Type 1
Part of 8L32 & 8L33 Generators shown on Pages 169B-6, 169B-8, 169F-4 and 169F-6



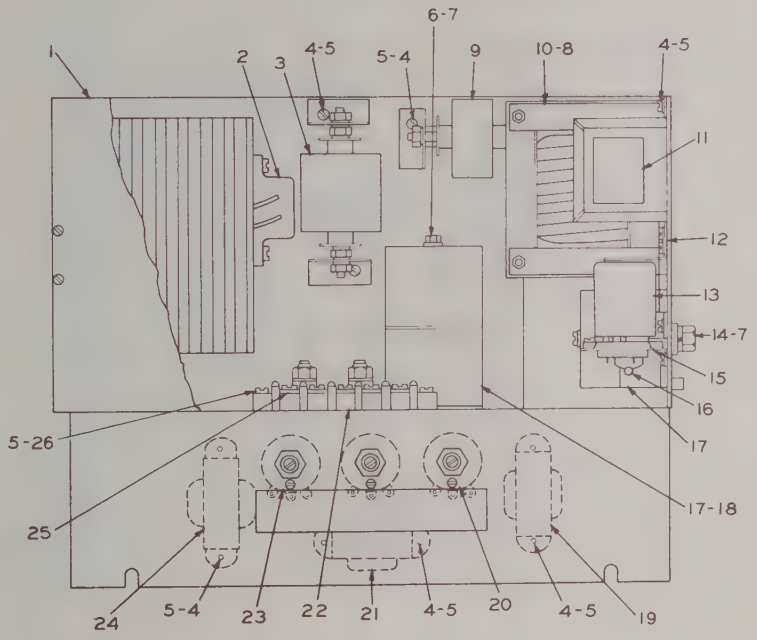
REF NO.	PART NUMBER	DESCRIPTION	QTY
1	4B1220	SCREW	2
2	4B4863	WASHER	2
3	2N4698	RESISTOR	1
	2N4721	WASHER (Plain)	2
	2N4699	WASHER	2
4	7S1197	SCREW	2
5	4B2043	NUT	4
6	9B7233	LOCKWASHER	42
7	2N4722	BOLT	1
8	8L5832	NUT	2
9	8F1434	LOCKWASHER	5
10	2N4700	BRACKET	1
11	2N4765	TERMINAL STRIP	1
	2N4766	STRIP (Marker)	1
12	3D9799	SCREW	6
13	2N4692	STRAP	1
	7L7400	CAPACITOR	4
14	4B1221	SCREW	10
15	2N5764	RESISTOR ASSEM.	1
16	2N4693	CAPACITOR	2
17	2N4694	BRACKET	1
18	8L4276	REGULATOR ASSEM.	1
19	6L7008	CLAMP	4
20	8M8626	SCREW	4
21	8L5478	GROMMET	3
22	8L5040	TERMINAL	2

C INDICATES CHANGE

23	8L4092	BLOCK	1
24	7L6750	FUSE	2
25	2N4688	WIRING HARNESS	1
	8L5826	SOCKET ASSEM.	1
	7L3178	WIRE	1
26	1S7443	SCREW	1
	6L7161	NUT	1
	7F9223	LOCKWASHER	1
27	2N4689	HEAT SINK (Field)	1
C	2N3474	SCREW	4
28	8L5853	NUT	2
	3L8187	LOCKWASHER	4
C 29	3N2156	SCREW	20
	8L5827	NUT	20
30	6L3590	RECTIFIER (Field)	1
C 31	7S4346	SCREW	3
32	1H4336	SCREW	1
33	7S1201	SCREW	2
34	7L8032	RECTIFIER (Build-Up)	1
35	6L9660	RECTIFIER (Controlled)	2
	6L3600	RECTIFIER (Power)	2
36	2N4691	HEAT SINK (Controlled)	2
	2N4690	HEAT SINK (Power)	2
C 37	3N4470	INSULATOR	1

115387

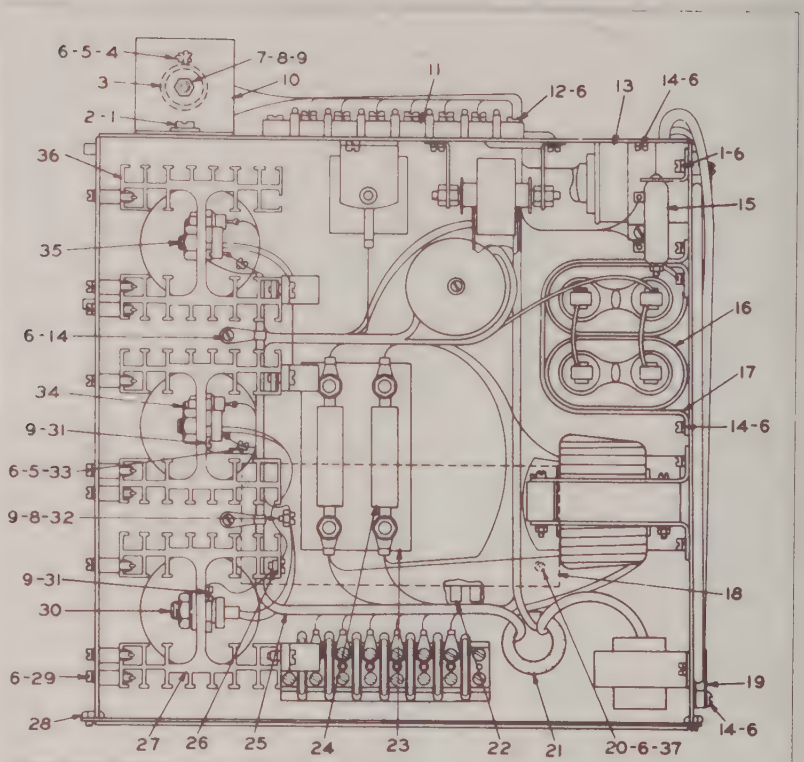
1N8507 EXCITER AND REGULATOR ASSEMBLY—Part 1—Type 2
Part of 8L32 and 8L33 Generators shown on Pages
169B-6, 169B-8, 169F-4 and 169F-6



	REF. NO.	PART NUMBER	DESCRIPTION	QTY
	1	1N5036	GUARD ASSEM.	1
		6L6421	LABEL---------(Warning)--------	1
	2	7L4062	SUPPRESSOR ASSEM.	3
	3	8L4873	VOLTAGE SUPPRESSOR	1
	4	4B1220	SCREW	20
	5	9B7233	LOCKWASHER	24
C	6	2N8489	BOLT	1
C	7	4L1250	NUT	2
		4B4274	WASHER	4
	8	8F1434	LOCKWASHER	4
	9	8L4863	VOLTAGE SUPPRESSOR	1
	10	2N4695	REACTOR ASSEM.	1
C		7S4346	SCREW	4
	11	6L6622	REACTOR	1
	12	7L331	BRACKET	1
	13	8L5823	RELAY	1
	14	3L8199	SCREW	1
	15	8L5824	BRACKET	1
	16	7L2770	RECTIFIER	1
	17	2N4696	REACTOR ASSEM.	3
C	18	3N3466	SPACER	3
C	19	3N4303	TRANSFORMER ASSEM.	1
	20	6L7003	POTENTIOMETER	1
	21	8L4269	TRANSFORMER	1
	22	2L1717	TERMINAL STRIP	1
	23	6L8401	POTENTIOMETER	1
	24	7L7812	CHOKE	1
	25	1N7253	STRIP----------(Marker)--------	1
C	26	7S4338	SCREW	4

C INDICATES CHANGE 115388

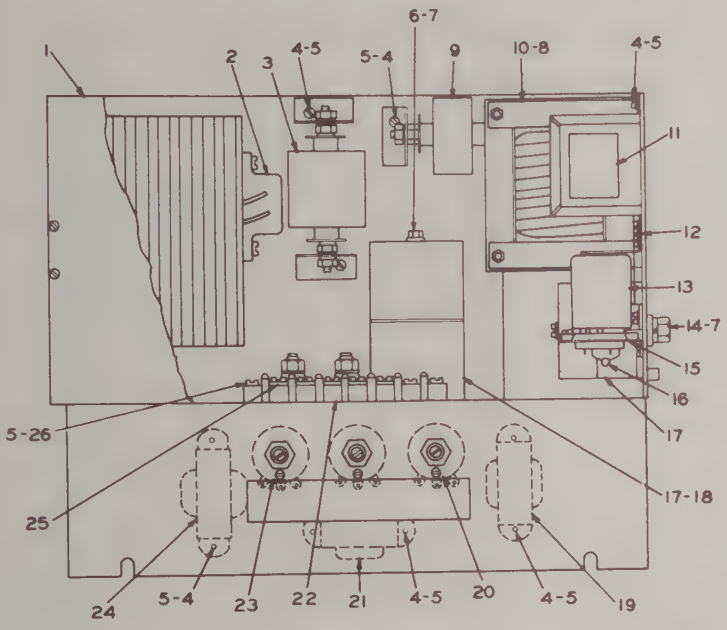
1N8507 EXCITER AND REGULATOR ASSEMBLY—Part 2—Type 2
Part of 8L32 and 8L33 Generators shown on Pages
169B-6, 169B-8, 169F-4 and 169F-6



REF NO	PART NUMBER	DESCRIPTION	QTY
1	4B1220	SCREW	4
2	4B4863	WASHER	2
3	2N4698	RESISTOR	1
	2N4721	WASHER (Plain)	2
	2N4699	WASHER	2
4	7S1197	SCREW	2
5	4B2043	NUT	4
6	9B7233	LOCKWASHER	42
7	2N4722	BOLT	1
8	8L5832	NUT	2
9	8F1434	LOCKWASHER	5
10	2N4700	BRACKET	1
11	2N4765	TERMINAL STRIP	1
	2N4766	STRIP (Marker)	1
12	3D9799	SCREW	6
13	2N4692	STRAP	1
	7L7400	CAPACITOR	4
14	4B1221	SCREW	8
15	2N5764	RESISTOR ASSEM.	1
16	2N4693	CAPACITOR	2
17	2N4694	BRACKET	1
18	8L4276	REGULATOR ASSEM.	1
19	6L7008	CLAMP	4
20	8M8626	SCREW	4
21	8L5478	GROMMET	3
22	8L5040	TERMINAL	2
23	8L4092	BLOCK	1
24	7L6750	FUSE	2
25	3N4883	WIRING HARNESS	1
	1S7443	SCREW	1
26	6L7161	NUT	1
	7F9223	LOCKWASHER	1
27	2N4689	HEAT SINK (Field)	1
	2N3474	SCREW	4
28	8L5853	NUT	2
	3L8187	LOCKWASHER	4
29	3N2156	SCREW	20
	8L5827	NUT	20
30	6L3590	RECTIFIER (Field)	1
31	7S4346	SCREW	3
32	1H4336	SCREW	1
33	7S1201	SCREW	2
34	7L8032	RECTIFIER (Build-Up)	2
35	6L9660	RECTIFIER (Controlled)	2
	6L3600	RECTIFIER (Power)	2
36	2N4691	HEAT SINK (Controlled)	2
	2N4690	HEAT SINK (Power)	2
37	3N4470	INSULATOR	1

142328

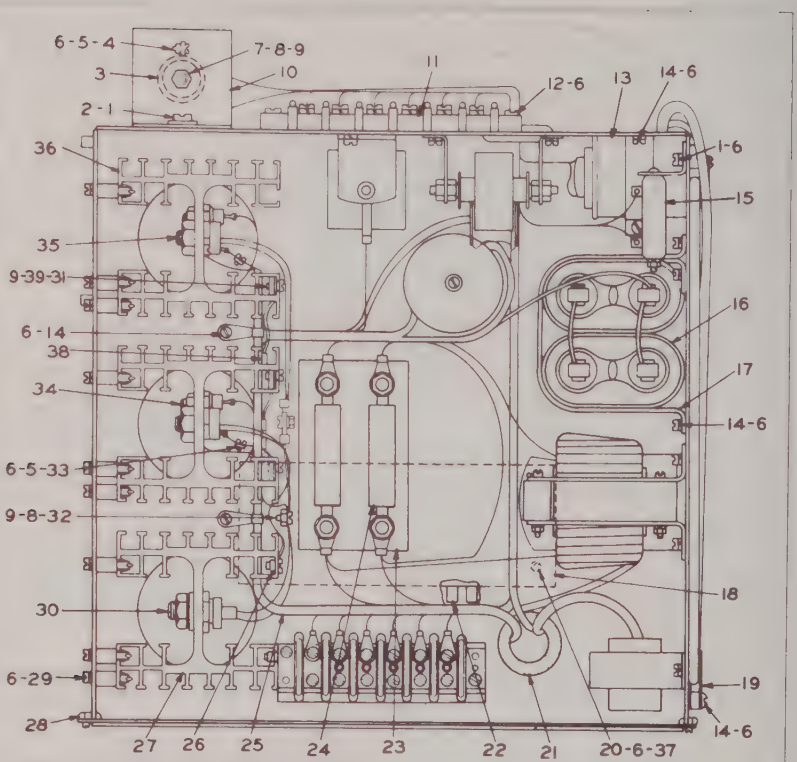
3N4692 EXCITER AND REGULATOR ASSEMBLY—Part 1—Type 1
Part of 8L32, 8L33 & 8L93 Generators shown on
Pages 169B-10, 169F-8 and 169M



REF NO.	PART NUMBER	DESCRIPTION	QTY
1	1N5036	GUARD ASSEM.	1
	6L6421	LABEL---------(Warning)--------	1
2	7L4062	SUPPRESSOR ASSEM.	3
3	8L4873	VOLTAGE SUPPRESSOR	1
4	4B1220	SCREW	18
5	9B7233	LOCKWASHER	24
6	2N8489	BOLT	1
7	4L1250	NUT	2
	4B4274	WASHER	4
8	8F1434	LOCKWASHER	4
9	8L4863	VOLTAGE SUPPRESSOR	1
10	2N4695	REACTOR ASSEM.	1
	7S4346	SCREW	4
11	6L6622	REACTOR	1
12	7L331	BRACKET	1
13	8L5823	RELAY	1
14	3L8199	SCREW	1
15	8L5824	BRACKET	1
16	7L2770	RECTIFIER	2
17	2N4696	REACTOR ASSEM.	3
18	3N3466	SPACER	3
19	3N4303	TRANSFORMER ASSEM.	1
20	6L7003	POTENTIOMETER	2
21	8L4269	TRANSFORMER	1
22	3H4647	TERMINAL STRIP	1
23	6L8401	POTENTIOMETER	1
24	7L7812	CHOKE	1
25	1N5050	STRIP----------(Marker)--------	1
26	7S4338	SCREW	4

142329

3N4692 EXCITER AND REGULATOR ASSEMBLY—Part 2—Type 1
Part of 8L32, 8L33 & 8L93 Generators shown on
Pages 169B-10, 169F-8 & 169M

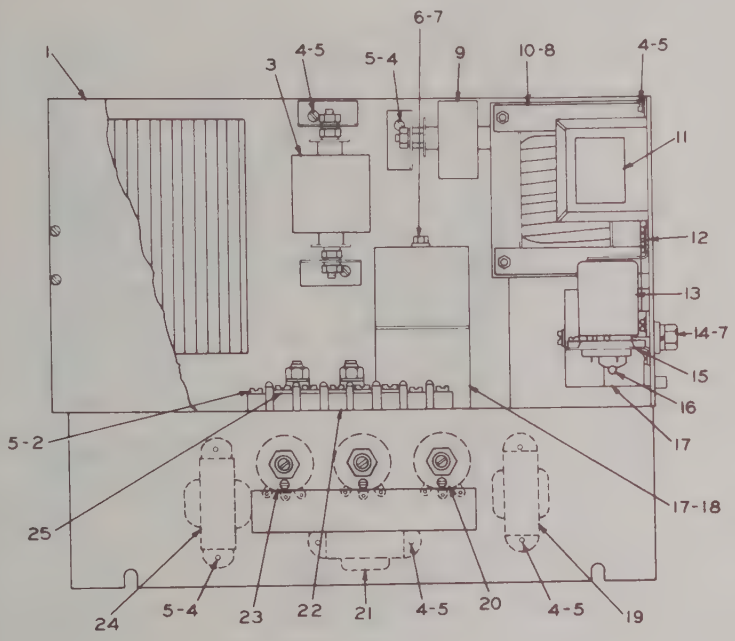


REF. NO.	PART NUMBER	DESCRIPTION	QTY
1	4B1220	SCREW	4
2	4B4863	WASHER	2
3	2N4698	RESISTOR	1
	2N4721	WASHER (Plain)	2
	2N4699	WASHER	2
4	7S1197	SCREW	2
5	4B2043	NUT	4
6	9B7233	LOCKWASHER	42
7	2N4722	BOLT	1
8	8L5832	NUT	2
9	8F1434	LOCKWASHER	5
10	2N4700	BRACKET	1
11	2N4765	TERMINAL STRIP	1
	2N4766	STRIP (Marker)	1
12	3D9799	SCREW	6
13	2N4692	STRAP	1
	7L7400	CAPACITOR	4
14	4B1221	SCREW	8
15	2N5764	RESISTOR ASSEM.	1
16	2N4693	CAPACITOR	2
17	2N4694	BRACKET	1
18	8L4276	REGULATOR ASSEM.	1
19	6L7008	CLAMP	4
20	8M8626	SCREW	4
21	8L5478	GROMMET	3
22	8L5040	TERMINAL	2
23	8L4092	BLOCK	1
24	7L6750	FUSE	2
25	3N4883	WIRING HARNESS	1
	1S7443	SCREW	1
26	6L7161	NUT	1
	7F9223	LOCKWASHER	1
C 27	3N9448	HEAT SINK (Field)	1
	2N3474	SCREW	4
28	8L5853	NUT	2
	3L8187	LOCKWASHER	4
29	3N2156	SCREW	20
	8L5827	NUT	20
30	6L3590	RECTIFIER (Field)	1
31	7S4346	SCREW	3
32	1H4336	SCREW	1
33	7S1201	SCREW	2
34	7L8032	RECTIFIER (Build-Up)	2
35	6L9660	RECTIFIER (Controlled)	2
	6L3600	RECTIFIER (Power)	2
C 36	3N9450	HEAT SINK (Controlled)	2
C	3N9449	HEAT SINK (Power)	2
37	3N4470	INSULATOR	1
C 38	3N9434	SUPPRESSOR ASSEM.	3
C 39	7H3711	NUT	3

C INDICATES CHANGE

157350

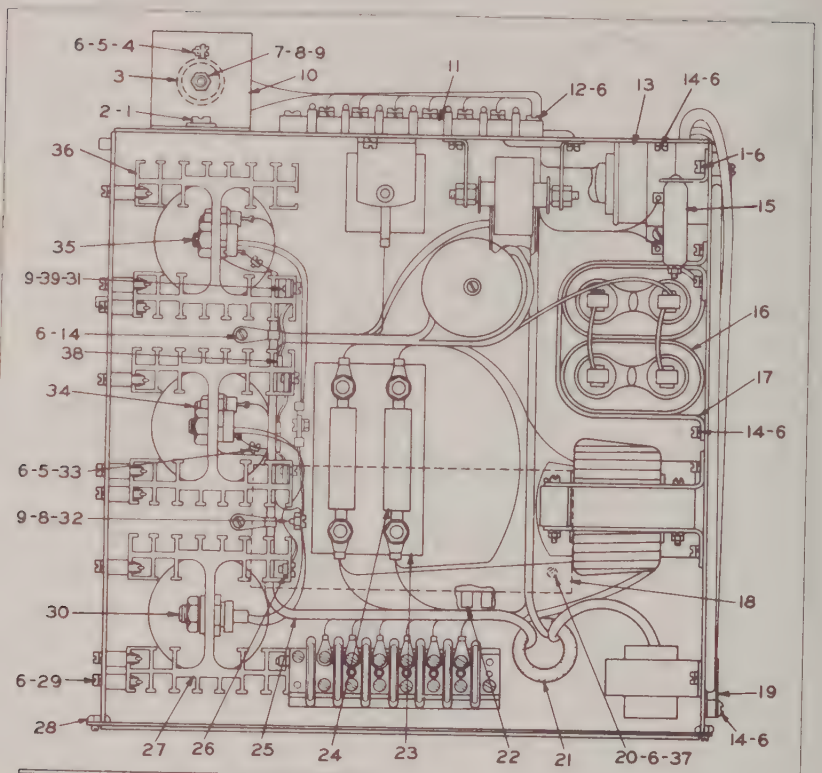
3N4692 EXCITER AND REGULATOR ASSEMBLY—Part 1—Type 2
Part of 8L32, 8L33 and 8L93 Generators shown on Pages 169B-10, 169F-8 and 169M



REF. NO.	PART NUMBER	DESCRIPTION	QTY
1	1N5036	GUARD ASSEM. (Includes)	1
	6L6421	LABEL---------(warning)------	1
C 2	7S4338	SCREW----------	2
3	8L4873	VOLTAGE SUPPRESSOR- --------	1
4	4B1220	SCREW----------	18
C 5	9B7233	LOCKWASHER----------	24
6	2N8489	BOLT----------	1
7	4L1250	NUT----------	2
	4B4274	WASHER----------	4
C 8	8F1434	LOCKWASHER----------	4
9	8L4863	VOLTAGE SUPPRESSOR----------	1
10	2N4695	REACTOR ASSEM. ----------	1
C	7S4346	SCREW----------	4
11	6L6622	REACTOR----------	1
12	7L331	BRACKET----------	1
13	8L5823	RELAY----------	1
14	3L8199	SCREW----------	1
15	8L5824	BRACKET----------	1
16	7L2770	RECTIFIER----------	2
17	2N4696	REACTOR ASSEM. ----------	3
18	3N3466	SPACER---- ----------	3
19	3N4303	TRANSFORMER ASSEM. ----------	1
20	6L7003	POTENTIOMETER----------	2
21	8L4269	TRANSFORMER----------	1
C 22	4L1377	STRIP----------(marker)-------	1
23	6L8401	POTENTIOMETER----------	1
24	7L7812	CHOKE----------	1
C 25	8M2777	TERMINAL STRIP----------	1

157351

3N4692 EXCITER AND REGULATOR ASSEMBLY—Part 2—Type 2
Part of 8L32, 8L33 & 8L93 Generators shown on Pages 169B-10, 169F-8 & 169M



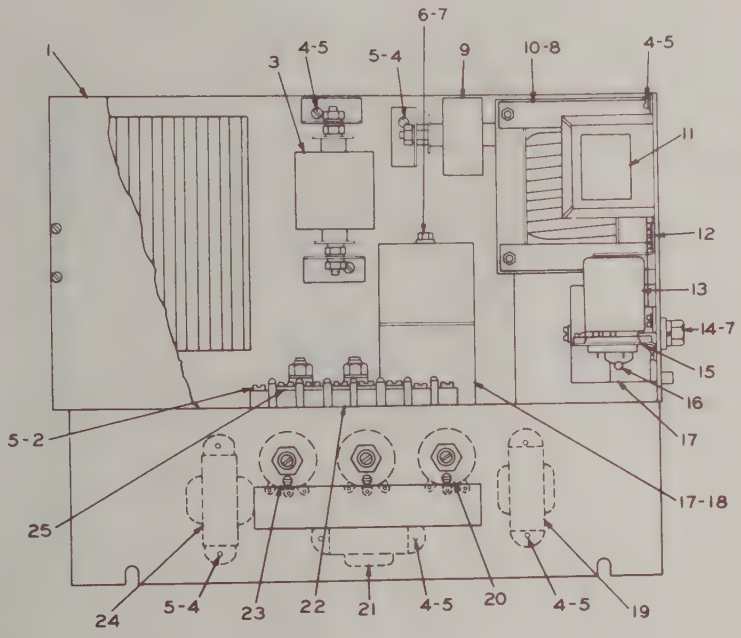
REF. NO.	PART NUMBER	DESCRIPTION	QTY
1	4B1220	SCREW	4
2	4B4863	WASHER	2
3	2N4698	RESISTOR	1
	2N4721	WASHER (Plain)	2
	2N4699	WASHER	2
4	7S1197	SCREW	2
5	4B2043	NUT	4
6	9B7233	LOCKWASHER	42
7	2N4722	BOLT	1
8	8L5832	NUT	2
9	8F1434	LOCKWASHER	5
10	2N4700	BRACKET	1
11	2N4765	TERMINAL STRIP	1
	2N4766	STRIP (Marker)	1
12	3D9799	SCREW	6
C 13	5N7033	BRACKET	1
C	5N6170	CAPACITOR	4
14	4B1221	SCREW	8
15	2N5764	RESISTOR ASSEM.	1
C 16	5N6172	CAPACITOR	2
C 17	5N7034	BRACKET	1
18	8L4276	REGULATOR ASSEM.	1
19	6L7008	CLAMP	4
20	8M8626	SCREW	4
21	8L5478	GROMMET	3
22	8L5040	TERMINAL	2
23	8L4092	BLOCK	1
24	7L6750	FUSE	2
25	3N4883	WIRING HARNESS	1
	1S7443	SCREW	1
26	6L7161	NUT	1
	7F9223	LOCKWASHER	1
27	3N9448	HEAT SINK (Field)	1
	2N3474	SCREW	4
28	8L5853	NUT	2
	3L8187	LOCKWASHER	4
29	3N2156	SCREW	20
	8L5827	NUT	20
30	6L3590	RECTIFIER (Field)	1
31	7S4346	SCREW	3
32	1H4336	SCREW	1
33	7S1201	SCREW	2
34	7L8032	RECTIFIER (Build-Up)	2
35	6L9660	RECTIFIER (Controlled)	2
	6L3600	RECTIFIER (Power)	2
36	3N9450	HEAT SINK (Controlled)	2
	3N9449	HEAT SINK (Power)	2
37	3N4470	INSULATOR	1
38	3N9434	SUPPRESSOR ASSEM.	3
39	7H3711	NUT	3

C INDICATES CHANGE

226969

3N4692 EXCITER AND REGULATOR ASSEMBLY—Part 1—Type 3

Part of 8L32, 8L33 and 8L93 Generators shown on Pages 169B-10, 169F-8 and 169M

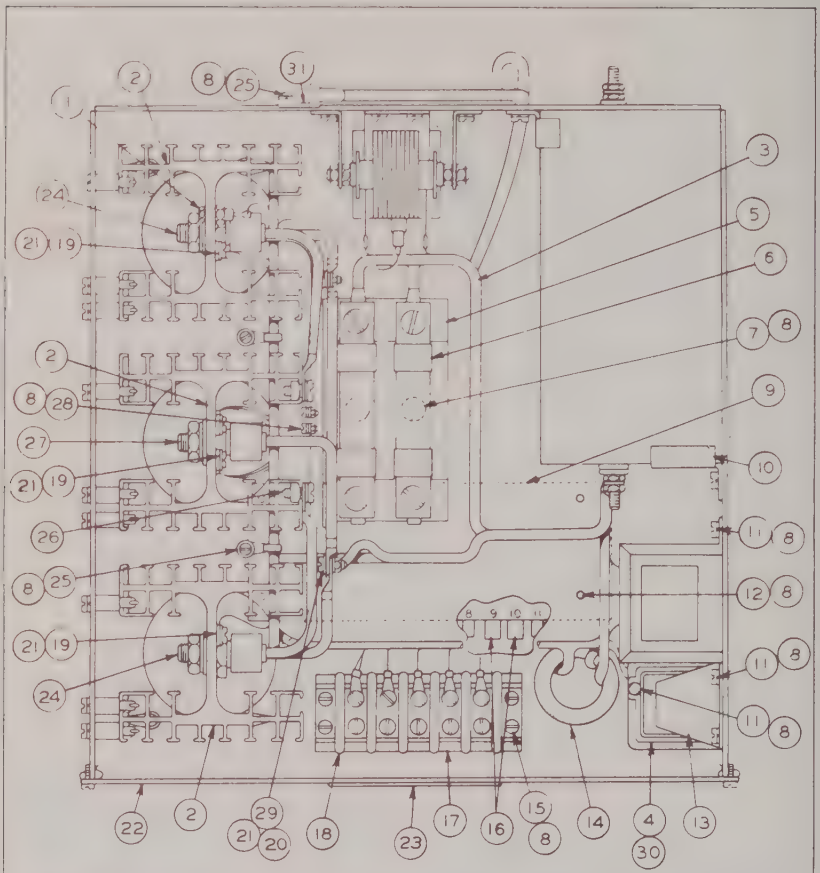


REF. NO.	PART NUMBER	DESCRIPTION	QTY
1	1N5036	GUARD ASSEM.	1
		(Includes)	
	6L6421	LABEL---------(warning)------	1
2	7S4338	SCREW----------	2
3	8L4873	VOLTAGE SUPPRESSOR----------	1
4	4B1220	SCREW----------	18
5	9B7233	LOCKWASHER----------	24
6	2N8489	BOLT----------	1
7	4L1250	NUT----------	2
	4B4274	WASHER----------	4
8	8F1434	LOCKWASHER----------	4
9	8L4863	VOLTAGE SUPPRESSOR----------	1
10	2N4695	REACTOR ASSEM.	1
	7S4346	SCREW----------	4
11	6L6622	REACTOR----------	1

12	7L331	BRACKET----------	1
13	8L5823	RELAY----------	1
14	3L8199	SCREW----------	1
15	8L5824	BRACKET----------	1
16	7L2770	RECTIFIER----------	2
17	2N4696	REACTOR ASSEM.	3
18	3N3466	SPACER----------	3
19	3N4303	TRANSFORMER ASSEM.	1
20	6L7003	POTENTIOMETER----------	2
21	8L4269	TRANSFORMER----------	1
22	4L1377	STRIP----------(marker)--------	1
23	6L8401	POTENTIOMETER----------	1
24	7L7812	CHOKE----------	1
25	8M2777	TERMINAL STRIP----------	1

226970

3N4692 EXCITER AND REGULATOR ASSEMBLY—Part 2—Type 3
Part of 8L32, 8L33 and 8L93 Generators shown on Pages 169B-10, 169F-8 and 169M

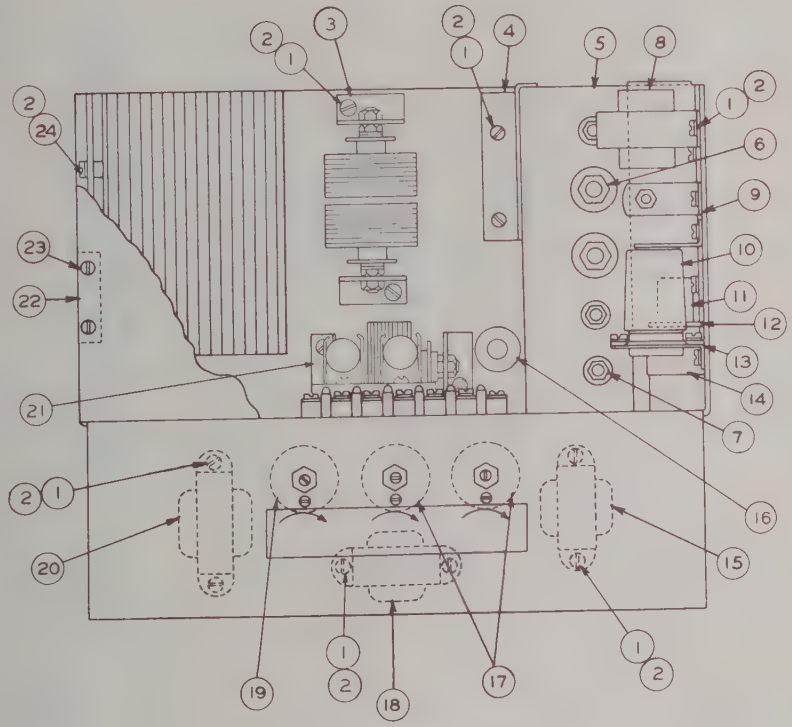


REF NO.	PART NUMBER	DESCRIPTION	QTY
1	7L8032	RECTIFIER	1
2	7L335	HEAT SINK	3
3	1N5569	WIRING HARNESS	1
4	8L5826	SOCKET ASSEM. (Part of 1N5569 Wiring Harness)	1
5	7L7398	BLOCK	1
6	7L6745	FUSE	2
7	3D9799	SCREW	2
8	9B7233	LOCKWASHER----(Shakeproof)----	22
9	8L5460	REGULATOR ASSEM.	1
10	8L5829	BRACKET	1
11	4B1220	SCREW	6
12	8M8626	SCREW	4
13	7L331	BRACKET	1
14	8L5478	GROMMET	1
15	5M6668	SCREW	4
16	8L5040	TERMINAL	2
17	1N7253	STRIP	1

REF NO.	PART NUMBER	DESCRIPTION	QTY
18	2L1717	TERMINAL STRIP	1
19	4B1237	SCREW	4
20	8L5832	NUT	1
21	8F1434	LOCKWASHER	5
22	1N5036	GUARD ASSEM.	1
23	6L6421	WARNING LABEL (Part of 1N5036 Guard Assem.)	1
24	6L9660	RECTIFIER	2
25	4B1221	SCREW	4
26	1S7443	SCREW	2
	6L7161	NUT	2
	7F9223	LOCKWASHER	2
27	6L3590	RECTIFIER	3
28	7S1201	SCREW	2
	4B2043	NUT	2
29	1H4336	SCREW	1
30	7L2770	RECTIFIER	1
31	6L7008	CLAMP	2

124320

1N9205 EXCITER AND REGULATOR ASSEMBLY—Part 1
Part of 7L92 Generator shown on Page 169H-2

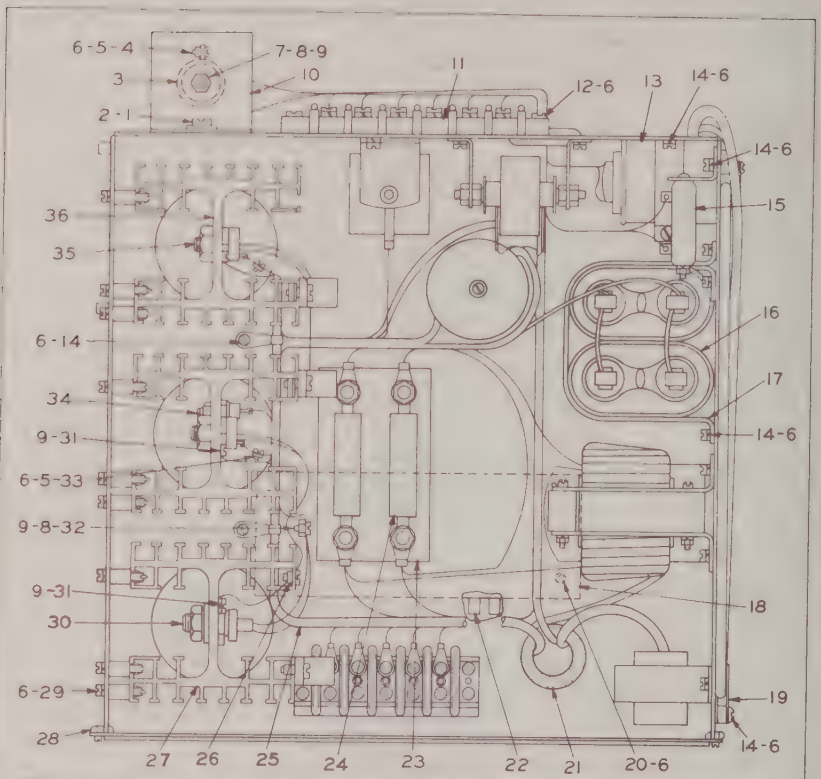


REF NO	PART NUMBER	DESCRIPTION	QTY
1	4B1220	SCREW	22
2	9B7233	LOCKWASHER----(Shakeproof)	34
3	8L4873	VOLTAGE SUPPRESSOR	1
4	8L5830	BRACKET	1
5	1N5567	NOISE SUPPRESSION ASSEM.	1
6	1D4717	NUT	4
	3B4506	LOCKWASHER	4
7	1B4330	NUT	6
	3B4504	LOCKWASHER	6
	(Parts of 1N5567 Noise Suppression Assem.)		
8	6L6622	REACTOR	1
9	1N9308	RESISTOR ASSEM.	1
10	8L5823	RELAY	1
11	7L7392	BOOT	1

REF. NO.	PART NUMBER	DESCRIPTION	QTY.
12	7L7400	CAPACITOR	1
13	8L5824	BRACKET	1
14	7L7402	STRAP	1
15	6L6623	TRANSFORMER-----(Isolation)	1
16	1N9147	GROMMET	1
17	6L7003	POTENTIOMETER-----(Level)	2
18	8L4269	TRANSFORMER--(Regulator Power)	1
19	6L7004	POTENTIOMETER-----(Droop)	1
20	7L7812	CHOKE	1
21	8L4863	VOLTAGE SUPPRESSOR	1
22	8L5853	NUT----------(Clip)	2
23	5S7348	SCREW	4
	3L8187	LOCKWASHER	4
24	8L5828	SCREW---	12
	8L5827	NUT---------(Expansion)	12

124399

1N9205 EXCITER AND REGULATOR ASSEMBLY—Part 2
Part of 7L92 Generator shown on Page 169H-2



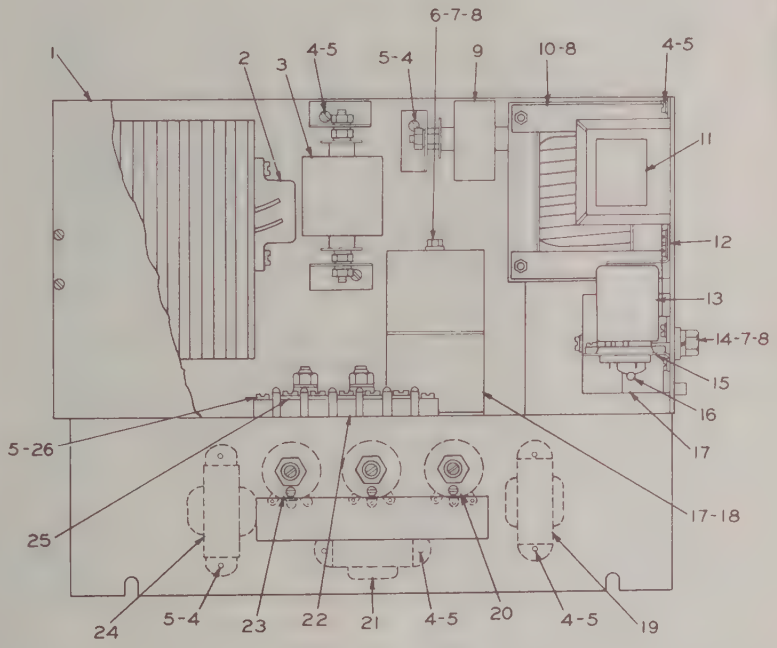
REF. NO.	PART NUMBER	DESCRIPTION	QTY
1	4B1220	SCREW	4
2	4B4863	WASHER	2
3	2N4698	RESISTOR	1
	2N4721	WASHER--------(Plain)	2
	2N4699	WASHER	2
4	7S1197	SCREW	2
5	4B2043	NUT	4
6	9B7233	LOCKWASHER	44
7	2N4722	BOLT	1
8	8L5832	NUT	2
9	8F1434	LOCKWASHER	5
10	2N4700	BRACKET	1
11	2N4765	TERMINAL STRIP	1
	2N4766	STRIP---------(Marker)	1
12	3D9799	SCREW	6
13	2N4692	STRAP	1
	7L7400	CAPACITOR	4
14	4B1221	SCREW	8
15	2N5764	RESISTOR ASSEM.	1
16	2N4693	CAPACITOR	2
17	2N4694	BRACKET	1
18	8L5460	REGULATOR ASSEM.	1
19	6L7008	CLAMP	4
20	8M8626	SCREW	4
21	8L5478	GROMMET	3
22	8L5040	TERMINAL	2

REF NO	PART NUMBER	DESCRIPTION	QTY
23	8L4092	BLOCK	1
24	7L6750	FUSE	2
25	2N4688	WIRING HARNESS	1
	8L5826	SOCKET ASSEM	1
		(Part of 2N4688 Assem.)	
	7L3178	WIRE	1
		(Part of 8L5826 Assem.)	
	1S7443	SCREW	1
26	6L7161	NUT	1
	7F9223	LOCKWASHER	1
27	2N4689	HEAT SINK--------(Field)	1
	5S7348	SCREW	4
28	8L5853	NUT	2
	3L8187	LOCKWASHER	4
29	8L5828	SCREW	20
	8L5827	NUT	20
30	6L3590	RECTIFIER-------(Field)	1
31	4B1237	SCREW	3
32	1H4336	SCREW	1
33	7S1201	SCREW	2
34	7L8032	RECTIFIER-------(Build-Up)	1
35	6L9660	RECTIFIER------(Controlled)	2
	6L3600	RECTIFIER--------(Power)	2
36	2N4691	HEAT SINK------(Controlled)	2
	2N4690	HEAT SINK--------(Power)	2

127911

2N5990 EXCITER AND REGULATOR ASSEMBLY—Part 1

Part of 8L34 Generator shown on Pages 169H-4 and 169H-6. Only separate parts serviced. When complete Assembly is required order 3N4701 shown on Pages 171L and 171M



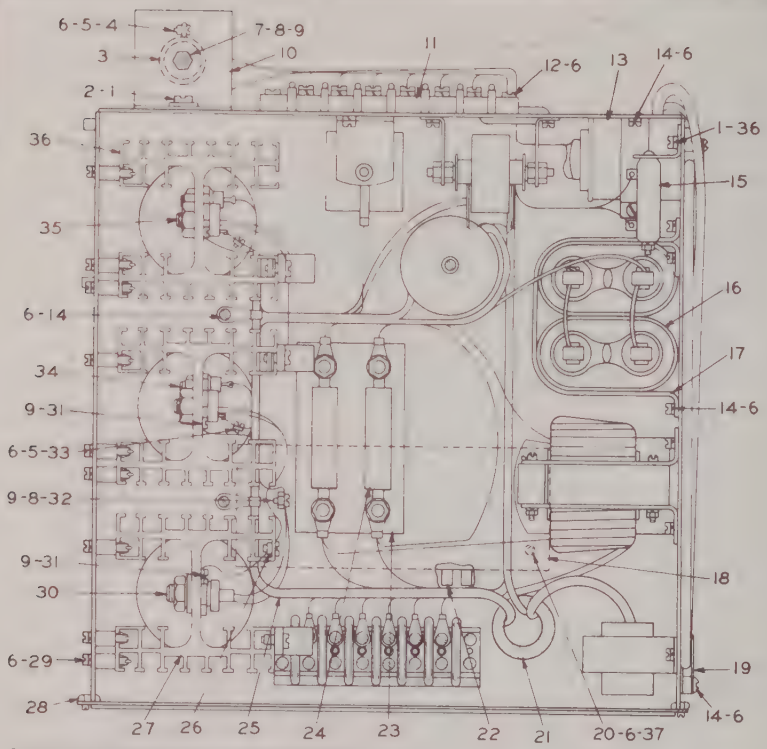
REF. NO.	PART NUMBER	DESCRIPTION	QTY
1	1N5036	GUARD ASSEM.	1
	6L6421	LABEL---------(Warning)-------- (Part of 1N5036 Assem.)	1
2	7L4062	SUPPRESSOR ASSEM.	3
3	8L4873	VOLTAGE SUPPRESSOR	1
4	4B1220	SCREW	18
5	9B7233	LOCKWASHER	22
6	2N4720	BOLT	1
7	8L5832	NUT	2
	4B4274	WASHER	2
8	8F1434	LOCKWASHER	6
9	8L4863	VOLTAGE SUPPRESSOR	1
10	2N4695	REACTOR ASSEM.	1
	9F9327	SCREW	4
11	6L6622	REACTOR	1

REF. NO.	PART NUMBER	DESCRIPTION	QTY
12	7L331	BRACKET	1
13	8L5823	RELAY	1
14	3L8199	SCREW	1
15	8L5824	BRACKET	1
16	7L2770	RECTIFIER	1
17	2N4696	REACTOR ASSEM.	3
18	2N4697	SPACER	3
19	6L6623	TRANSFORMER	1
20	6L7003	POTENTIOMETER	2
21	8L4269	TRANSFORMER	1
22	2L1717	TERMINAL STRIP	1
23	6L7004	POTENTIOMETER	1
24	7L7812	CHOKE	1
25	1N7253	STRIP----------(Marker)--------	1
26	5M6668	SCREW	4

127912

2N5990 EXCITER AND REGULATOR ASSEMBLY—Part 2

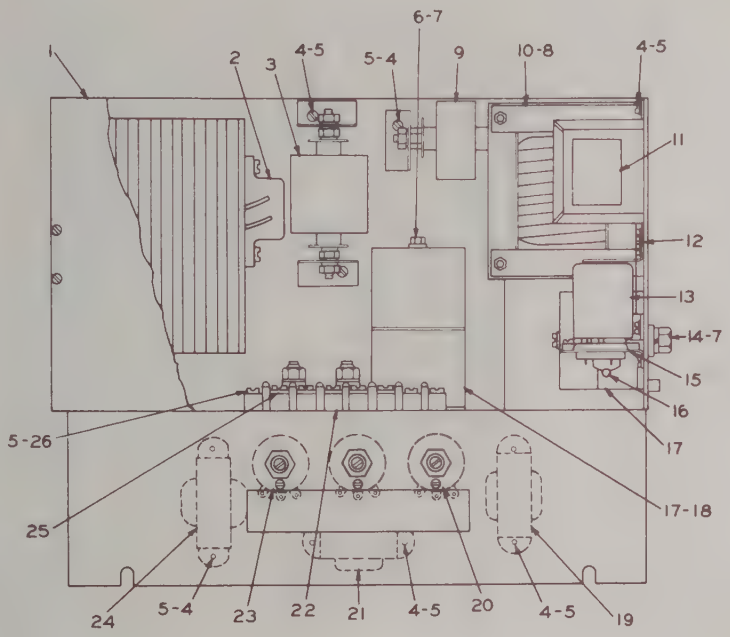
Part of 8L34 Generator shown on Pages 169H-4 and 169H-6. Only separate parts serviced. When complete Assembly is required order 3N4701 shown on Pages 171L and 171M



REF NO	PART NUMBER	DESCRIPTION	QTY
1	4B1220	SCREW	4
2	4B4863	WASHER	2
3	2N4698	RESISTOR	1
	2N4721	WASHER (Plain)	2
	2N4699	WASHER	2
4	7S1197	SCREW	2
5	4B2043	NUT	4
6	9B7233	LOCKWASHER	44
7	2N4722	BOLT	1
8	8L5832	NUT	2
9	8F1434	LOCKWASHER	5
10	2N4700	BRACKET	1
11	2N4765	TERMINAL STRIP	1
	2N4766	STRIP (Marker)	1
12	3D9799	SCREW	6
13	2N4692	STRAP	1
	7L7400	CAPACITOR	4
14	4B1221	SCREW	8
15	2N5764	RESISTOR ASSEM.	1
16	2N4693	CAPACITOR	2
17	2N4694	BRACKET	1
18	8L5460	REGULATOR ASSEM.	1
19	6L7008	CLAMP	4
20	8M8626	SCREW	4
21	8L5478	GROMMET	3
22	8L5040	TERMINAL	2
23	8L4092	BLOCK	1
24	7L6750	FUSE	2
25	3N4883	WIRING HARNESS	1
	1S7443	SCREW	1
26	6L7161	NUT	1
	7F9223	LOCKWASHER	1
27	2N4689	HEAT SINK (Field)	1
	2N3474	SCREW	4
28	8L5853	NUT	2
	3L8187	LOCKWASHER	4
29	3N2156	SCREW	20
	8L5827	NUT	20
30	6L3590	RECTIFIER (Field)	1
31	7S4346	SCREW	3
32	1H4336	SCREW	1
33	7S1201	SCREW	2
34	7L8032	RECTIFIER (Build-Up)	2
35	6L9660	RECTIFIER (Controlled)	2
	6L3600	RECTIFIER (Power)	2
36	2N4691	HEAT SINK (Controlled)	2
	2N4690	HEAT SINK (Power)	2
37	3N4470	INSULATOR	1

142342

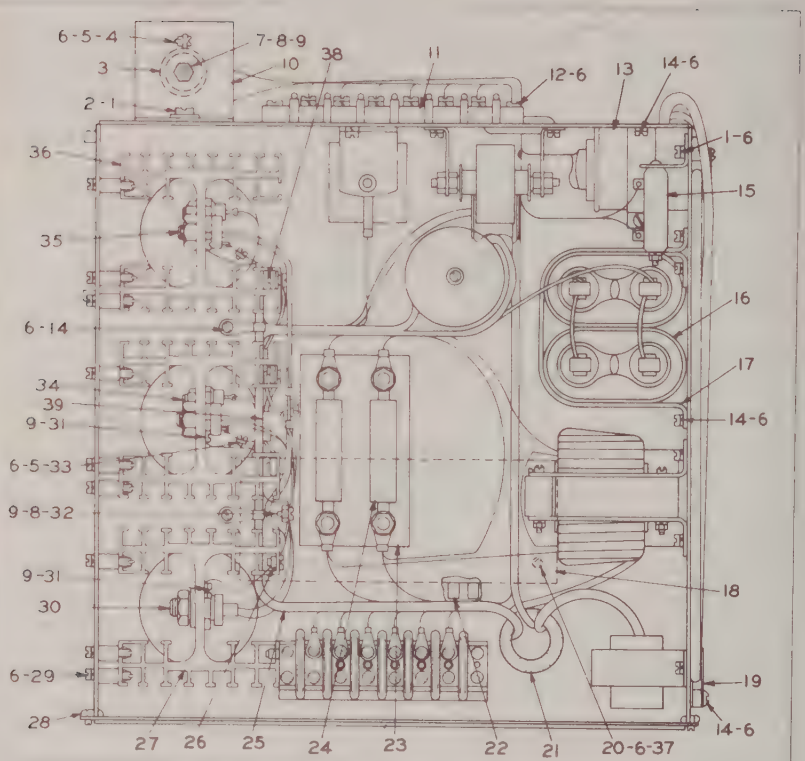
3N4701 EXCITER AND REGULATOR ASSEMBLY—Part 1—Type 1
Part of 8L34 Generator shown on Page 169H-8



REF. NO.	PART NUMBER	DESCRIPTION	QTY
1	1N5036	GUARD ASSEM.	1
	6L6421	LABEL-(Warning)	1
2	7L4062	SUPPRESSOR ASSEM.	3
3	8L4873	VOLTAGE SUPPRESSOR	1
4	4B1220	SCREW	18
5	9B7233	LOCKWASHER	22
6	2N8489	BOLT	1
7	4L1250	NUT	2
	4B4274	WASHER	4
8	8F1434	LOCKWASHER	4
9	8L4863	VOLTAGE SUPPRESSOR	1
10	2N4695	REACTOR ASSEM.	1
	7S4346	SCREW	4
11	6L6622	REACTOR	1
12	7L331	BRACKET	1
13	8L5823	RELAY	1
14	3L8199	SCREW	1
15	8L5824	BRACKET	1
16	7L2770	RECTIFIER	2
17	2N4696	REACTOR ASSEM.	3
18	3N3466	SPACER	3
19	3N4303	TRANSFORMER	1
20	6L7003	POTENTIOMETER	2
21	8L4269	TRANSFORMER	1
22	3H4647	TERMINAL STRIP	1
23	6L7004	POTENTIOMETER	1
24	7L7812	CHOKE	1
25	1N5050	STRIP-(Marker)	1
26	7S4338	SCREW	4

142460

3N4701 EXCITER AND REGULATOR ASSEMBLY—Part 2—Type 1
Part of 8L34 Generator shown on Page 169H-8

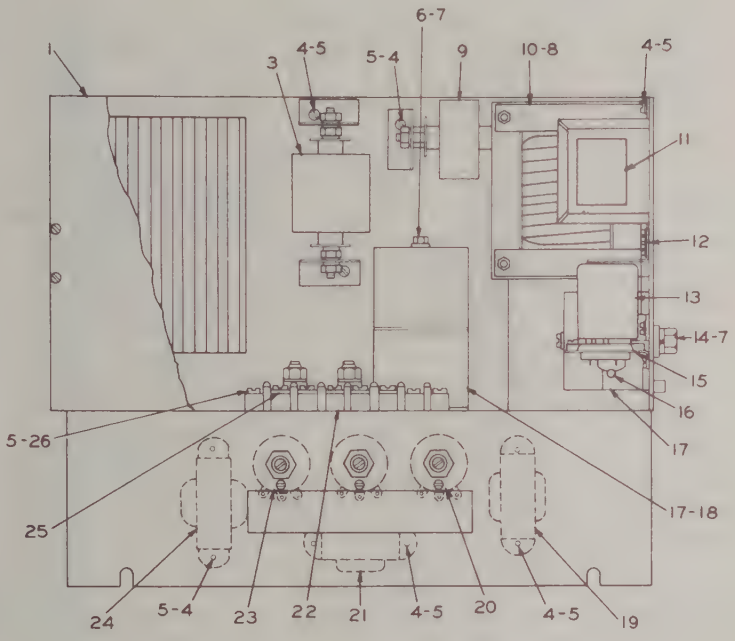


REF NO.	PART NUMBER	DESCRIPTION	QTY
1	4B1220	SCREW	4
2	4B4863	WASHER	2
3	2N4698	RESISTOR	1
	2N4721	WASHER (Plain)	2
	2N4699	WASHER	2
4	7S1197	SCREW	2
5	4B2043	NUT	4
C 6	9B7233	LOCKWASHER	42
7	2N4722	BOLT	1
8	8L5832	NUT	2
9	8F1434	LOCKWASHER	5
10	2N4700	BRACKET	1
11	2N4765	TERMINAL STRIP	1
	2N4766	STRIP (Marker)	1
12	3D9799	SCREW	6
13	2N4692	STRAP	1
	7L7400	CAPACITOR	4
14	4B1221	SCREW	8
15	2N5764	RESISTOR ASSEM.	1
16	2N4693	CAPACITOR	2
17	2N4694	BRACKET	1
18	8L5460	REGULATOR ASSEM.	1
19	6L7008	CLAMP	4
20	8M8626	SCREW	4
21	8L5478	GROMMET	3
22	8L5040	TERMINAL	2
23	8L4092	BLOCK	1
24	7L6750	FUSE	2
25	3N4883	WIRING HARNESS	1
	1S7443	SCREW	1
26	6L7161	NUT	1
	7F9223	LOCKWASHER	1
C 27	3N9448	HEAT SINK (Field)	1
	2N3474	SCREW	4
28	8L5853	NUT	2
	3L8187	LOCKWASHER	4
29	3N2156	SCREW	20
	8L5827	NUT	20
30	6L3590	RECTIFIER (field)	1
31	7S4346	SCREW	3
32	1H4336	SCREW	1
33	7S1201	SCREW	2
34	7L8032	RECTIFIER (Build-Up)	2
35	6L9660	RECTIFIER (Controlled)	2
	6L3600	RECTIFIER (Power)	2
C 36	3N9450	HEAT SINK (Controlled)	2
C	3N9449	HEAT SINK (Power)	2
37	3N4470	INSULATOR	1
C 38	7H3711	NUT	3
C 39	3N9434	SUPPRESSOR ASSEM.	1

C INDICATES CHANGE

157352

3N4701 EXCITER AND REGULATOR ASSEMBLY—Part 1—Type 2
Part of 8L34 Generator shown on Page 169H-8

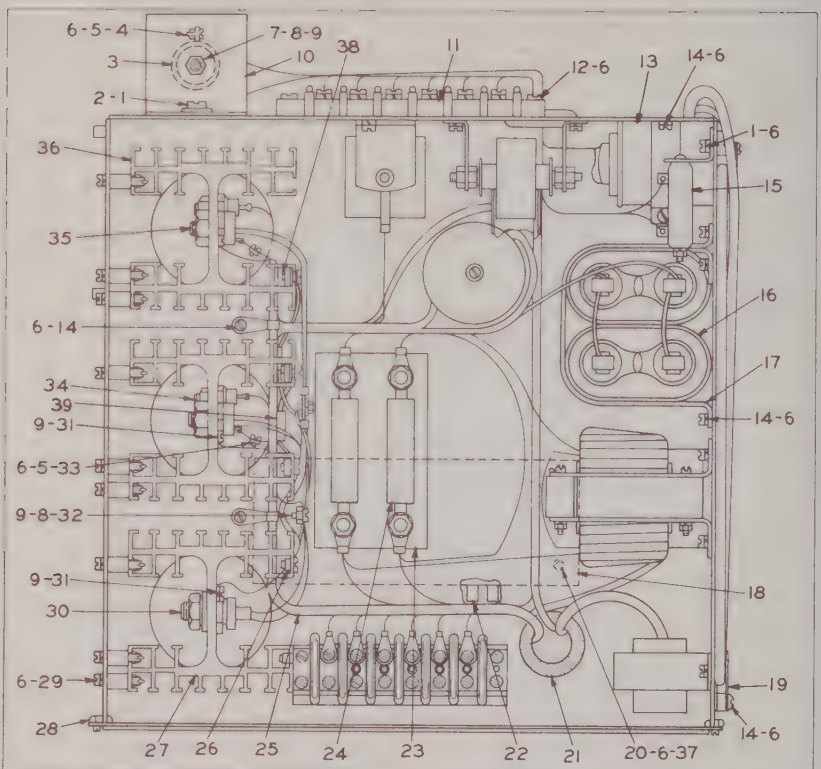


REF. NO	PART NUMBER	DESCRIPTION	QTY
1	1N5036	GUARD ASSEM.	1
	6L6421	LABEL-------(Warning)--------	1
3	8L4873	VOLTAGE SUPPRESSOR---------	1
4	4B1220	VOLTAGE SUPPRESSOR----------	18
5	9B7233	LOCKWASHER------ ---------	22
6	2N8489	BOLT--- ----- - - -- ---- ---	1
7	4L1250	NUT- - - -- ---------- - - -	2
	4B4274	WASHER- -- --------- ---- -	4
8	8F1434	LOCKWASHER----------	4
9	8L4863	VOLTAGE SUPPRESSOR----------	1
10	2N4695	REACTOR ASSEM. - ----- ---- -- -	1
	7S4346	SCREW- ---------- - - -----	4
11	6L6622	REACTOR------- - ----- ------	1
12	7L331	BRACKET----------	1
13	8L5823	RELAY----------	1
14	3L8199	SCREW----------	1
15	8L5824	BRACKET----------	1
16	7L2770	RECTIFIER----------	2
17	2N4696	REACTOR ASSEM. --------- ------	3
18	3N3466	SPACER----------	3
19	3N4303	TRANSFORMER----------	1
20	6L7003	POTENTIOMETER----------	2
21	8L4269	TRANSFORMER----------	1
C 22	8M2777	TERMINAL BOARD----------	1
23	6L7004	POTENTIOMETER----------	1
24	7L7812	CHOKE----------	1
C 25	4L1377	STRIP----------(marker)---------	1
C 26	7S4338	SCREW----------	2

C INDICATES CHANGE

157353

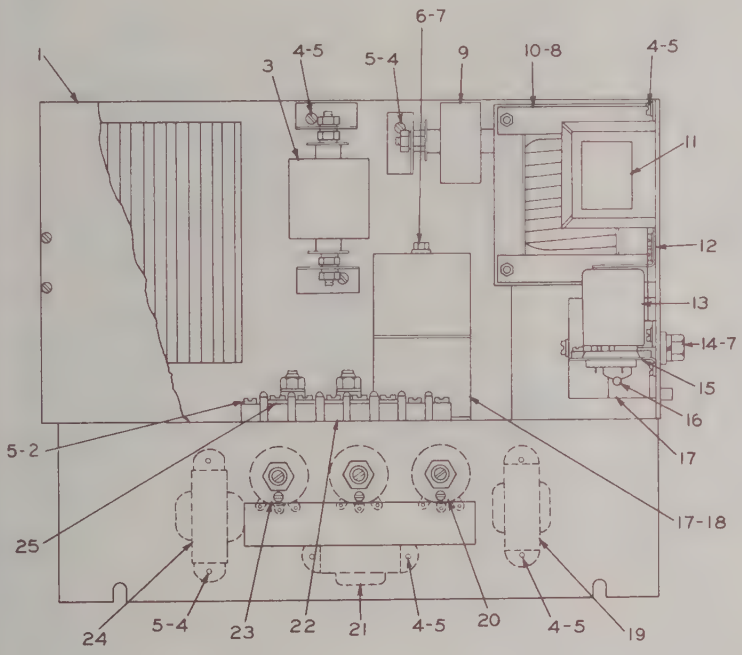
3N4701 EXCITER AND REGULATOR ASSEMBLY—Part 2—Type 2
Part of 8L34 Generator shown on Page 169H-8



REF. NO.	PART NUMBER	DESCRIPTION	QTY
1	4B1220	SCREW	4
2	4B4863	WASHER	2
3	2N4698	RESISTOR	1
	2N4721	WASHER--(Plain)	2
	2N4699	WASHER	2
4	7S1197	SCREW	2
5	4B2043	NUT	4
6	9B7233	LOCKWASHER	42
7	2N4722	BOLT	1
8	8L5832	NUT	2
9	8F1434	LOCKWASHER	5
10	2N4700	BRACKET	1
11	2N4765	TERMINAL STRIP	1
	2N4766	STRIP--(Marker)	1
12	3D9799	SCREW	6
C	5N7033	BRACKET	1
C 13	5N6170	CAPACITOR	4
14	4B1221	SCREW	8
15	2N5764	RESISTOR ASSEM.	1
C 16	5N6172	CAPACITOR	2
C 17	5N7034	BRACKET	1
18	8L5460	REGULATOR ASSEM.	1
19	6L7008	CLAMP	4
20	8M8626	SCREW	4
21	8L5478	GROMMET	3
22	8L5040	TERMINAL	2
23	8L4092	BLOCK	1
24	7L6750	FUSE	2
25	3N4883	WIRING HARNESS	1
	1S7443	SCREW	1
26	6L7161	NUT	1
	7F9223	LOCKWASHER	1
27	3N9448	HEAT SINK--(Field)	1
	2N3474	SCREW	4
28	8L5853	NUT	2
	3L8187	LOCKWASHER	4
29	3N2156	SCREW	20
	8L5827	NUT	20
30	6L3590	RECTIFIER--(field)	1
31	7S4346	SCREW	3
32	1H4336	SCREW	1
33	7S1201	SCREW	2
34	7L8032	RECTIFIER--(Build-Up)	2
35	6L9660	RECTIFIER--(Controlled)	2
	6L3600	RECTIFIER--(Power)	2
36	3N9450	HEAT SINK--(Controlled)	2
	3N9449	HEAT SINK--(Power)	2
37	3N4470	INSULATOR	1
38	7H3711	NUT	3
39	3N9434	SUPPRESSOR ASSEM.	1

C INDICATES CHANGE 176483

3N4701 EXCITER AND REGULATOR ASSEMBLY—Part 1—Type 3
Part of 8L34 Generator shown on Page 169H-8

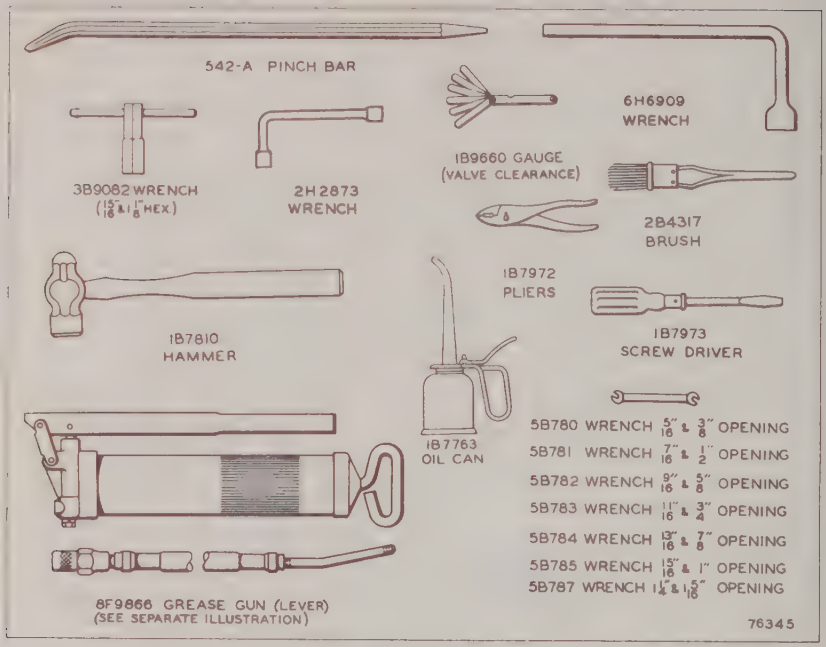


REF. NO.	PART NUMBER	DESCRIPTION	QTY
1	1N5036	GUARD ASSEM.	1
	6L6421	LABEL-------(Warning)--------	1
2	7S4338	SCREW	2
3	8L4873	VOLTAGE SUPPRESSORE	1
4	4B1220	VOLTAGE SUPPRESSOR	18
5	9B7233	LOCKWASHER	22
6	2N8489	BOLT	1
7	4L1250	NUT	2
	4B4274	WASHER	4
8	8F1434	LOCKWASHER	4
9	8L4863	VOLTAGE SUPPRESSOR	1
10	2N4695	REACTOR ASSEM.	1
	7S4346	SCREW	4
11	6L6622	REACTOR	1

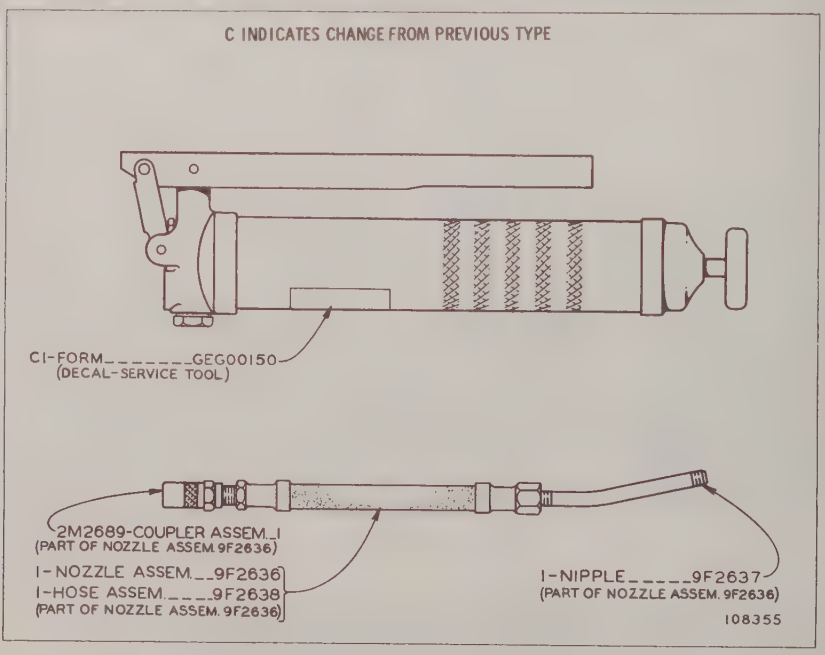
12	7L331	BRACKET	1
13	8L5823	RELAY	1
14	3L8199	SCREW	1
15	8L5824	BRACKET	1
16	7L2770	RECTIFIER	2
17	2N4696	REACTOR ASSEM.	3
18	3N3466	SPACER	3
19	3N4303	TRANSFORMER	1
20	6L7003	POTENTIOMETER	2
21	8L4269	TRANSFORMER	1
22	8M2777	TERMINAL BOARD	1
23	6L7004	POTENTIOMETER	1
24	7L7812	CHOKE	1
25	4L1377	STRIP----------(marker)---------	1

176484

3N4701 EXCITER AND REGULATOR ASSEMBLY—Part 2—Type 3
Part of 8L34 Generator shown on Page 169H-8



4L1560 TOOL GROUP
AN ATTACHMENT
Only separate parts serviced. When complete group is required order 9S7977



8F9866 GREASE GUN
Part of 4L1560 & 9S7977 Tool Groups

9S7977 TOOL GROUP
AN ATTACHMENT

9S1738 SCREWDRIVER
NO. 2 PHILLIPS

2P8250 STRAP WRENCH ASSEM.

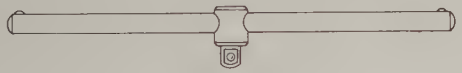
5S9569 SOCKET

8H8503 WRENCH (5/16" Opening)
8H8505 WRENCH (3/8" Opening)
8H8513 WRENCH (7/8" Opening)
8H8508 WRENCH (9/16" Opening)
8H8509 WRENCH (5/8" Opening)
8H8511 WRENCH (3/4" Opening)
8H8515 WRENCH (1" Opening)

1F1157 SCREWDRIVER

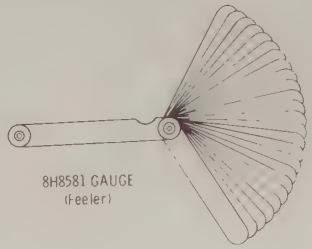
5S9568 SOCKET

C 5P1763 SOCKET



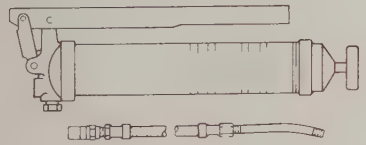
5S9566 WRENCH

8H8549 SOCKET (9/16" Opening)
8H8554 SOCKET (7/8" Opening)
8H8555 SOCKET (15/16" Opening)
8H8556 SOCKET (1" Opening)
9S1730 SOCKET (11/8" Opening)



8H8581 GAUGE
(Feeler)

5S9567 EXTENSION



8F9866 GREASE GUN (Lever)
(See Separate Illustration)

5F4764 PRY BAR

C INDICATES CHANGE

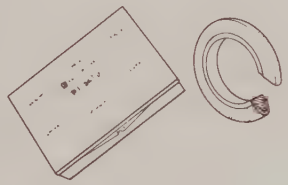
201200

QUANTITY USED	PART NUMBER	DESCRIPTION
1	3N3790	PLATE--SERIAL NUMBER ON REAR L.H. SIDE OF CYLINDER BLOCK
1	9L6531	PLATE--CAUTION AND INFORMATION
2	4B4158	DRIVE SCREW
1	4N9347	TRANSFER--D353 CAT ON FRONT SIDE OF AIR INTAKE MANIFOLD
1	8L9765	FILM--WARNING ON FUEL INJECTION HOUSING COVER

NAME PLATES AND TRANSFERS

1P2305 ELECTRIC TERMINAL KIT

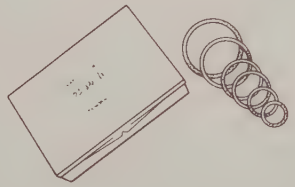
(Insulated)
(Includes terminals, wire joints and crimping tool)



9S3138 SEAL KIT

(Includes 28 metal - backed seals)

Qty.	Nominal Size	Part No.
2	1/2 inch (1,27 cm)	5J1583
6	3/4 inch (1,905 cm)	6J3575
6	1 inch (2,54 cm)	6J3600
6	1 1/4 inch (3,175 cm)	6J3625
4	1 1/2 inch (3,81 cm)	6J3650
4	2 inches (5,08 cm)	6J3800



9S3135 SEAL KIT

(Includes 60 rubber O-ring seals)

Qty.	Nominal Size	Part No.
10	1/2 inch (1,27 cm)	4J5140
10	3/4 inch (1,905 cm)	4J5267
10	1 inch (2,54 cm)	4J0520
10	1 1/4 inch (3,175 cm)	4J0522
10	1 1/2 inch (3,81 cm)	4J0524
10	2 inches (5,08 cm)	4J0527

THREADED INSERTS KITS

Master (Includes inserts and tools)

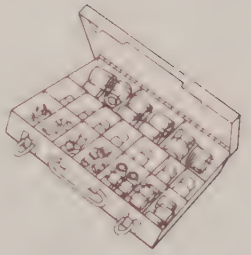
Coarse	Fine	Size
9S3700	9S3500	Assorted

Repair (Includes inserts and tools)

9S3510	9S3509	#10
9S3512	9S3511	1/4
9S3514	9S3513	5/16
9S3618	9S3515	3/8
9S3620	9S3619	7/16
9S3622	9S3621	1/2
9S3624	9S3623	9/16
9S3626	9S3625	5/8
9S3628	9S3627	3/4
9S3630	9S3629	7/8
9S3632	9S3631	1
9S3633		1 1/8
9S3635		1 1/4
9S3637		1 1/2

Refill (Includes inserts)

9S3674	9S3673	#10
9S3649	9S3639	1/4
9S3650	9S3640	5/16
9S3651	9S3641	3/8
9S3652	9S3642	7/16
9S3653	9S3643	1/2
9S3654	9S3644	9/16
9S3655	9S3645	5/8
9S3656	9S3646	3/4
9S3657	9S3647	7/8
9S3658	9S3648	1
9S3675		1 1/8
9S3677		1 1/4
9S3679		1 1/2



HARDWARE ASSORTMENT KITS

8S7198 Course Thread Hex Nut
8S7197 Fine Thread Hex Nut
8S7196 Lockwasher Assortment
8S7195 Flatwasher Assortment
8S7193 Woodruff Key Assortment

139338

GASKET CEMENT

5H2471 8 oz. (227 g)

EPOXY CEMENT

5M2941 2 - 2 oz. (57g) Tube

BEARING LUBRICANT

2S3230 14 1/2 oz. (411 g)

GASKET SEALER

4H5363 11 oz. (312 g)
(fast drying-hard setting)
8H5137 11 oz. (312 g)
(non-hardening)

ANTI-SEIZURE COMPOUND

4S9416 16 oz. (454 g) Aerosol
9M3710 16 oz. (454 g) Paste

GLASS OR PLASTIC CEMENT

3S1831 1 pint (0.473 L)

LIQUID GASKET

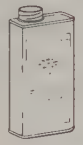
7M7260 8 oz. (227 g)

SEALING COMPOUND

5S1454 1 pint (0.473 L)

GREASE - SILICONE

4L7464 8 oz. (227 g)



SILICONE FLUID

8M553 145 cc.
9M5165 150 cc.

GREASE GUN CARTRIDGE

1P808 14 1/2 oz. (411 gms)

COOLING SYSTEM INHIBITOR

3P2043 1 pint (0.473 L)
P0001 1 case of 12
3P2044 1 quart (0.946 L)
P0002 1 case of 12

9S3262 SEALANT REPAIR KIT

contains:

Bearing Mount	7M7456	1 2/3 fl. oz. (50 cc)
Thread Lock	9S3263	1 2/3 fl. oz. (50 cc)
Pipe Sealant	9S3264	1 2/3 fl. oz. (50 cc)
Retaining Compound	9S3265	1 2/3 fl. oz. (50 cc)
Quick Cure Primer	8M8060	6 oz. (170 g) Aerosol

CHAIN & CABLE LUBRICANT

9S6106 16 oz. (454 g) Aerosol
2P2737 Case of 12

BELT DRESSING

9S6107 16 oz. (454 g) Aerosol
2P2738 Case of 12

ELECTRO-INSULATION SPRAY

9S6108 16 oz. (454 g) Aerosol
2P2739 Case of 12

PENETRATING OIL

9S6109 16 oz. (454 g) Aerosol
2P2740 Case of 12

BATTERY SAVER & CLEANER

9S6110 16 oz. (454 g) Aerosol
2P2741 Case of 12

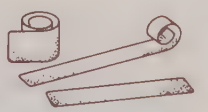
139339

ELECTRICAL TAPE

1P810 (plastic) 2/3" (20mm) width
66 ft. (20m) length
9B4287 (cloth) 3/4" (20mm) width
30 ft. (9M) length
(Plastic tape comes in dispenser. Cloth tape does not.)

BUTTON PLUGS

Hole Diameter Inches	Hole Diameter mm	Part Number
.219	5,6	4L0820
.310	7,9	7L6479
.380	9,7	5L6688
.438	11,1	4L0821
.469	11,9	3D9871
.484	12,3	8M3839
.500	12,7	3D9872
.625	15,9	2M4009
.687	17,5	6K2660
.750	19,0	5K3546
.875	22,2	5H4871
1.000	25,4	2D3406
1.250	31,8	4S6336
1.375	34,9	4F8711
1.500	38,1	3L1979
2.000	50,8	1L6377
2.250	57,2	7M3248
2.500	63,5	3L8852
3.000	76,2	1L6366



9S8703 ANTI-SKID TREADS

(May be ordered by foot lengths up to 60 feet (18,30m), width 4" (100mm)

MAGNETIC DRAIN PLUGS

Type	Thread Size-Threads Per Inch	Head Inches	A Inches	A mm	Part No.
I	5/8 - 11	7/8 Hex	1 3/16	26,9	5K1555
I	5/8 - 18	7/8 Hex	3/4	19,1	2R166
I	7/8 - 14	1 1/8 Hex	1 3/16	30,2	3H4190
I	1 1/8 - 12	1 1/2 Hex	1 1/2	38,1	8M3837
I	1 1/8 - 12	1 1/2 Hex	1 7/8	47,8	2J1559
I	1 1/2 - 12	1 Hex	1 1/2	38,1	8M5576
I	1 1/2 - 12	1 7/8 Hex	1 7/8	47,8	2D8390
II	1/2 - 14	9/16 Sq.	1 1/8	28,5	2F3628
II	3/4	5/8 Sq.	1 1/4	31,8	2H3865
II	7/8 - 14	7/8 Hex	1 5/8	41,3	2R1491
II	1 Std. Pipe Thd.	13/16 Sq.	1 7/16	36,6	2H3864
II	1 1/4 Std. Pipe Thd.	15/16 Sq.	1 11/16	42,9	2H3863
II	1 1/4 Std. Pipe Thd.	15/16 Sq.	1 3/8	35,0	7H3664
III	3/4 - 14 Pipe Thd., Fine	1/2 Sq.	1 3/16	30,2	5D1894
III	1 - 11 1/2 Pipe Thd., Fine	1/2 Sq.	1 5/16	33,4	2K744
III	1 1/4 - 11 1/2 Pipe Thd., Fine	3/4 Sq.	13/16	20,6	5S4017
III	2 - 12	3/4 Sq.	1 11/16	42,9	8B6599

8S4627 CIRCUIT TESTER

(Maximum Capacity: 10 oms)

SPECIFICATIONS

(SUBJECT TO CHANGE WITHOUT NOTICE)

Weight, shipping (approximate)	6,180 lbs.

DIMENSIONS

Length (approximate)	75.6"
Width (approximate)	43.4"
Height (excluding exhaust pipe)	65.5"

STARTING METHOD

Independent, two-cylinder, vertical gasoline engine, electric starting or air starting systems are available.

ATTACHMENTS

Additional equipment such as Tachometers, Generators, Turbochargers, etc., are available at extra cost. Consult your "Caterpillar" Dealer.

MACHINE SERIAL NUMBER PLATE LOCATION

Serial Number plate is located on the left-hand side of the cylinder block.

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CONVERSION EQUIVALENT TABLES

VOLUME AND CAPACITY EQUIVALENTS

Unit	Cu. In.	Cu. Ft.	Cu. Yd.	Cu. Cm.	Cu. M.	U.S. Liquid Gallons	Imperial Gallons	Liters
1 Cu. In.	1	.000579	.0000214	16.39	.0000164	.004329	.00359	.0164
1 Cu. Ft.	1728	1	.03704	28317	.0283	7.481	6.23	28.32
1 Cu. Yd.	46656	27	1	764600	.765	202	167.9	764.6
1 Cu. Cm.	.061	.0000353	.00000131	1	.000001	.000264	.00022	.001
1 Cu. M.	61020	35.31	1.308	1,000,000	1	264.2	220.2	1000
1 U.S. Liquid Gal.	231	.1337	.00495	3785	.003785	1	.833	3.785
1 Imperial Gallon	277.42	.16	.00594	4545.6	.004546	1.2	1	4.546
1 Liter	61.02	.03531	.001308	1000	.001	.2642	.22	1

LENGTH EQUIVALENTS

Unit	Centimeters	Inches	Feet	Yards	Meters	Kilometers
1 Centimeter	1	0.3937	0.03281	0.01094	0.01	
1 Inch	2,540	1	0.08333	0.02778	0.0254	
1 Foot	30.48	12	1	0.3333	0.3048	
1 Yard	91.44	36	3	1	0.9144	
1 Meter	100	39.37	3.281	1.0936	1	
1 Kilometer	100000	39370	3281	1093.6	1000	1

AREA EQUIVALENTS

Unit	Sq. Cm.	Sq. In.	Sq. M.	Sq. Ft.
1 Sq. Cm.	1	0.155		
1 Sq. In.	6.4516	1	.00064516	.006944
1 Sq. M.	10,000	1550	1	10.764
1 Sq. Ft.	929	144	0.0929	1

WEIGHT EQUIVALENTS

Unit	Kilograms	Ounces Avoirdupois	Pounds Avoirdupois
1 Kilogram	1	35.27	2.205
1 Ounce	0.02835	1	0.0625
1 Pound	0.4536	16	1

Inches to Centimeters and Centimeters to Inches

Inches or Centi-meters	Inches	Centi-meters	Inches or Centi-meters	Inches	Centi-meters
1	0.39	2.54	26	10.24	66.04
2	0.79	5.08	27	10.63	68.58
3	1.18	7.62	28	11.02	71.12
4	1.57	10.16	29	11.42	73.66
5	1.97	12.70	30	11.81	76.20
6	2.36	15.24	31	12.20	78.74
7	2.76	17.78	32	12.60	81.28
8	3.15	20.32	33	12.99	83.82
9	3.54	22.86	34	13.39	86.36
10	3.94	25.40	35	13.78	88.90
11	4.33	27.94	36	14.17	91.44
12	4.72	30.48	37	14.57	93.98
13	5.12	33.02	38	14.96	96.52
14	5.51	35.56	39	15.35	99.06
15	5.91	38.10	40	15.75	101.60
16	6.30	40.64	41	16.14	104.14
17	6.69	43.18	42	16.54	106.68
18	7.09	45.72	43	16.93	109.22
19	7.48	48.26	44	17.32	111.76
20	7.87	50.80	45	17.72	114.30
21	8.27	53.34	46	18.11	116.84
22	8.66	55.88	47	18.50	119.38
23	9.06	58.42	48	18.90	121.92
24	9.45	60.96	49	19.29	124.46
25	9.84	63.50	50	19.69	127.00

How to use:
11 inches = 27.94 centimeters
11 centimeters = 4.33 inches

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CATERPILLAR

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